IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

Rosen Technologies, LLC, Plaintiff, v. **Lennox Industries, Inc.,** Defendant.	**CASE NO. 3:22-CV-0732-K** **JURY TRIAL DEMANDED**

PLAINTIFF'S RESPONSIVE CLAIM CONSTRUCTION BRIEF

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Plaintiff Rosen Technologies LLC ("Plaintiff") submits this responsive claim construction brief setting forth its response to Defendant Lennox Industries, Inc.'s ("Defendant") Opening Claim Construction Brief (Dkt. No. 61) ("Br.") and its proposed constructions of the disputed terms and phrases of U.S. Patent Nos. 6,619,555 (the "'555 Patent"), 6,789,739 (the "'739 Patent"), 7,156,318 (the "'318 Patent"), 7,185,825 (the "'825 Patent"), and 7,232,075 (the "'075 Patent").

I. INTRODUCTION

The Court should adopt Plaintiff's proposed claim constructions or apply the plain and ordinary meaning to claim terms pursuant to Plaintiff's arguments. Defendant asks the Court to construe terms that are readily understood and need no construction. Furthermore, Defendant asks the court to suspend reason and find indefiniteness where terms inform those of skill in the art about the scope of the inventions with more than reasonable certainty. Accordingly, Defendant's arguments should be rejected.

II. DISPUTED CLAIM TERMS

A. Combined Terms

The following claim terms are used identically in several of the Patents-in-Suit and as such are addressed jointly.

1. *"means coupling said communications interface and said first remote correspondent" ('555 Patent, Claim 18, '075 Patent, Claim 1)*

Plaintiff	Defendant
Subject to § 112 ¶6 Structure: serial link and/or data link and any equivalents Function: coupling the communications interface and the remote correspondent	Means plus function limitation Function: coupling said communications interface and said first remote correspondent Structure: Indefinite.

Defendant argues that this term is indefinite because "neither a 'serial link' nor 'data link' are 'adequate' to perform the recited function." Br. at 2. Defendant goes on to identify physical components such as a modem, and the ISP to argue that "the 'serial link' 16 is not adequate to

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perform the recited task." Br. at 2. Defendant's argument is essentially that because a "serial link" or "data link" is not a physical structure, it is insufficient. This argument is incorrect. The fact that a "data link" or "serial link" are clearly defined and known structures is only further shown by *VoiceAge EVS LLC v. HMD Glob. Oy*, No. 19-1945-GBW, 2023 U.S. Dist. LEXIS 10844, at *17 (D. Del. 2023) where the court noted that "data link" was defined by the IBM Dictionary of Computing (10th ed., 1993). *See also e-LYNXX Corp. v. Innerworkings, Inc.*, No. 1:10-CV-2535, 2012 U.S. Dist. LEXIS 138997, at *70 (M.D. Pa. 2012) (construing term to include "generic external data link"); *see also Negotiated Data Sols., LLC v. Dell, Inc.*, 596 F. Supp. 2d 949, 963 (E.D. Tex. 2009) (construing "data link" according to plain and ordinary meaning); *see also Absolute Software, Inc. v. Stealth Signal, Inc.*, No. H-05-1416, 2008 U.S. Dist. LEXIS 109931, at *27-28 (S.D. Tex. 2008) (construing data link as a "direct or indirect" connection according to Newton's Telecom Dictionary). The terms "data link" and "serial link" are common names for specific structures and have a common and readily understood meaning that a POSITA would know. These structures are more than sufficient to perform the recited function.

Defendant also argues that the "serial link" or "data link" only couples the "'communications interface' to an intermediate element, such as a 'modem' and an 'ISP.'" However, Defendant's argument is clearly belied by the specification, which states that "the CPU 9 starts the process shown in FIG. 5 by issuing signals to the I/O unit 10 to cause the communications interface 14 to establish communications, via link 16, with a remote correspondent 15." '555 Patent at 4:7-10. The specification further states that "the current local weather information is transmitted from the remote correspondent 15 via link 16 to the communications interface 14". *Id.* at 4:16-19. As such, the specification clearly identifies the serial link and data link as the corresponding structures. *See also id.* at 6:11-18 (describing data

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link as structure). Plaintiff's expert agreed with this construction. *See* Palmer Decl. at ¶¶ 78-79 (Dkt. No. 60-6). While Defendant's expert Dr. Shoemake disagrees, Defendant included the declaration of another expert, Dr. R. Jacob Baker, with its Petition for *Inter Partes* Review of the '555 Patent, who agrees with Plaintiff's construction. *See Lennox Industries Inc. v. Rosen Technologies LLC*, IPR2023-00715 (PTAB, 2023) EX1002. Dr. Baker states

> Collectively, the buses, ports, and other equipment between the communications interface of Shamoon, and the equipment operated by the Internet Service provider, together with the Internet itself collectively form a data link that couples the communications interface to the remote correspondent. *See, e.g.*, EX1015, 685-686. The '555 Patent seems to agree that this is common knowledge of a POSITA because it refers to a connection using a modem connecting to an Internet service provider and using the Internet to be completed "in the well-known manner." EX1001, 6:1-11. Any one of the devices between the communications interface and the remote correspondent are data links because they serve to transmit data from one point to another.

Ex. A at 86.

> Because there is nothing special about the "data link" disclosed in the '555 Patent and it must simply accomplish the communication of data between the communications interface and remote correspondent, all of the above structures are an insubstantial difference for that purpose because they are all known to be interchangeable for that purpose.

Id. at 90.

> The combination of structures between the communications interface and the web server, which includes the Internet, forms a data link between them.

Id. at 130. The above passages from Dr. Baker's declaration show that one of Defendant's experts agrees that the "data link" which is "between the communications interface and the . . . remote correspondent" must simply "accomplish the communication . . . between [them]" and that this was "common knowledge." As such, Dr. Shoemake's arguments ring hollow.

Given that the identified structures have a commonly understood meaning to a POSITA, which numerous cases support, that the specification clearly identifies the "serial link" and/or "data link" as the corresponding structure coupling the communications interface and the remote

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correspondent, and that Plaintiff's expert and one of Defendant's experts agrees with this construction, the Court should adopt Plaintiff's construction and reject Defendant's arguments that this term is indefinite.

2. *"a sensor input coupled to said temperature sensor for receiving said electrical signal therefrom" ('555 Patent, Claim 18, '825 Patent, Claim 1, '075 Patent, Claim 1) / "a sensor input coupled to each said environmental condition sensors for receiving said electrical signal therefrom" ('318 Patent, Claim 1)*

Plaintiff	**Defendant**
No Construction Necessary Plain and Ordinary Meaning	Means plus function limitation Function: receiving said electrical signal from the sensor Structure: Indefinite.

3. *"a control output coupled to the space conditioning equipment for issuing control signals thereto" ('555 Patent, Claim 18, '318 Patent, Claim 1, '825 Patent, Claim 1, '075 Patent, Claim 1)*

Plaintiff	**Defendant**
No Construction Necessary Plain and Ordinary Meaning	Means plus function limitation. Function: issuing control signals to space conditioning equipment. Structure: Indefinite.

Defendant argues that the terms "sensor input" and "control output" are indefinite as they "correspond to no known class of structures"; that the claims do not describe a structure, and that the terms are only used in the claims. As shown below, each of these arguments is simply wrong or misleading. These claim elements require no construction as they have a readily understood plain and ordinary meaning to a POSITA. They are not means-plus-function claims as they do not contain the term means—even if they did, the terms themselves identify the structures performing the recited functions. As such, the Court should adopt the plain and ordinary meaning.

i. Neither of "Control Output" or "Sensor Input" are Controlled by § 112(6)

Neither "control output" nor "sensor input" are means-plus-function terms as the claims do not contain the triggering "means" language. This lack creates a rebuttable presumption—which

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Defendant fails to overcome—that the terms are not subject to § 112(6). Defendant argues that the terms fail to recite a sufficiently definite structure or recite the function without reciting sufficient structure for performing that function. Neither of these are true.

First, the terms "control output" and "sensor input" are structures which a POSITA would readily understand. The "sensor input" and "control output" are related to the "input/output" unit of the processor. *See* '555 Patent, Claim 1. All processors include one or more inputs and outputs which are used to input data into the processor and output results. The terms "sensor input" and "control output" are commonly understood terms of art which denote that the processor contains an input/output unit with a "sensor input" which receives "electrical signals" from the "temperature sensor" and a "control output" which "issue[s] control signals" to the "space conditioning equipment". *See* '555 Patent at Claim 18. Furthermore, the specification shows that these terms are commonly understood terms of art. '555 Patent at 3:54-60 ("The subject invention requires only the capabilities of such a processor, and off-the-shelf integrated circuit processor chips may be used"). In other words, the "sensor input" and "control output" are commonly understood terms and would be readily understood by a POSITA. *See* Dkt. No. 60-6 at ¶¶ 80, 84. This is shown by the figures of the Patents-in-Suit. For example, Figures 1-4 of the '555 Patent show that the input/output unit 10 of the processor 1, receives signals from sensor 5 and sends control signals to space conditioning equipment 3 via the input/output unit 10. *See* '555 Patent, Figs. 1-4. This type of input/output configuration for processors is common and a POSITA would readily be able to understand the meaning of the terms "sensor input" and "control output". As such, they are not means plus function terms.

Defendant's argument that these terms are means-plus-function terms relies on a sophism. Defendant argues that the clearly identified structures in the claim—the sensor input and control

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output—are simply descriptions of their functions—and as a result of this obfuscation, no structures are disclosed by the claims. *See* Br. at 6. The claims themselves render this argument meritless. For example, Claim 18 of the '555 Patent identifies the structures, the "sensor input" and "control output," and clearly identifies their functions, *i.e.*, receiving signals from the temperature sensor and sending control signals to the space conditioning equipment. As yet another example of the flaws in Defendant's argument, it is contradicted by Defendant's own expert, Dr. John Baker, who opined that "It was common knowledge of a POSITA that thermostat systems would have included a sensor input and control output, as acknowledged by the '555 Patent. . . . It accordingly would have been obvious to implement the input/output unit using an off the shelf component. These admissions demonstrate this element was well known to POSITA and it would have been obvious to use in a thermostat." Ex A at ¶ 134. Dr. Baker, Dr. Palmer, and the specifications of the Patents-in-Suit thus all agree that the terms "sensor input" and "control output" are commonly understood terms of art relating to the input/output unit of a processor, as is clearly described in the claims. *See* Ex. A at ¶ 134; Dkt. No. 60-6 at ¶¶ 80, 84; '555 Patent at '555 Patent at 3:54-60, Claim 1. The only outlier is Dr. Shoemake.[1]

For the same reasons, Defendant's attempt to color the testimony of Dr. Palmer also falls flat. Defendant cites *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014) for the proposition that terms like "device" are nonce terms devoid of meaning, and then attempts to argue the same for Dr. Palmer's use of the phrase "connection". Motion at 6-7. Dr. Palmer has already opined that the terms "sensor input" and "control output" are terms which would be readily understood by one of skill in the art. Dkt. No. 60-6 at ¶¶ 80, 84. Dr. Palmer was also readily able

[1] It is worth noting that in his own patent, Dr. Shoemake also used the term "sensor input", clearly demonstrating that it is a term of art that would be readily understood by a POSITA. *See.* U.S. Patent No. 8,914,837 at Claim 20, attached hereto as Exhibit B.

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to define the understanding that a POSITA would have of those terms. *See* Palmer Depo. at 67:1-4; 69:19-21 (Dkt. No. 60-8). Defendant is essentially arguing that because the terms "sensor input" and "control output" take their names from their function, that they cannot also identify the structure. Br. at 6. This argument is simply incorrect. Terms of art often take their names from the function they perform, but this does not make them indefinite if a POSITA would understand the structure. *See Personalized Media Communs., L.L.C. v. ITC*, 161 F.3d 696, 705 (Fed. Cir. 1998) ("Moreover, neither the fact that a 'detector' is defined in terms of its function, nor the fact that the term 'detector' does not connote a precise physical structure in the minds of those of skill in the art detracts from the definiteness of structure."). As such, the terms "sensor input" and "control output" have "sufficiently definite meaning as the name for structure." *Williamson*, 792 F.3d at 1349.

ii. Even if the Terms "Sensor Input" or "Control Output" invoked § 112(6), they are not Indefinite as the Specification Adequately Discloses the Structure

Even if the Court were to incorrectly conclude that these terms are means-plus-function terms—despite the claim itself disclosing the structures—it must find that the specification adequately discloses the structure performing the function. Defendant argues that because the specifications "fail to even use the terms" then they must be indefinite. Br. at 9. This is incorrect. The specification describes a processor 1 which includes—among other things—an "input/output unit (I/O) 10". '555 Patent at 3:13-15. Figures 1-4 show CPU 9 of Processor 1 connected to Sensor 5 and Space Conditioning Equipment 3 via input/output unit 10. The specification further states that "during normal operation, the temperature sensor 5 sends an electrical signal . . . representative of the temperature" which the processor uses to determine "if control signals need to be sent to the space conditioning equipment 3." '555 Patent at 3:30-38. As such only of skill in the art, reading the claims of the Patents-in-Suit, would readily understand that the input/output

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unit includes a sensor input, which receives signals from the temperature sensor, and a control output which sends control signals to the space conditioning equipment. *See* '555 Patent, Claim 18. As discussed above, these types of inputs and outputs are well known to anyone with any familiarity with off-the-shelf processors, and as such, these terms are not indefinite.

B. Means-Plus-Function Terms

1. *"storage means" ('739 Patent Claim, Claim 1)*

Plaintiff	**Defendant**
"storage" In the Alternative: Subject to § 112 ¶6 Structure: memory Function: storing location data	Storage means is a means plus function limitation Function: storing a physical location of the environmental controller Structure: Indefinite

Defendant incorrectly argues that this term is a means-plus-function term. While this claim term invokes § 112(6) via the use of the term "means" a "POSITA would recognize that 'storage means' in the context of the claim language, '…stored as location data in storage means in the controller' refers to data storage integral to the controller." Dkt. No. 60-6 at ¶ 94. As such, this term requires no construction. *See Centillion Data Sys., LLC v. Convergys Corp.*, 529 F. Supp. 2d 982, 995 (S.D. Ind. 2008) (holding term "storage means" was not means plus function since "structure was sufficiently known to one of ordinary skill in the art at the time of the invention."). As such, this Court should adopt the plain and ordinary meaning for this term as it requires no construction.

In the event this Court finds that this term is governed by § 112(6), it should adopt Plaintiff's proposed construction and find that the structure is "memory" while the function is "storing location data." Defendant argues that the function should be construed as "storing a physical location of the environmental controller" and claims that failing to do so would "read[] out critical language directed to the 'physical location of the environmental controller'". Br. at 22.

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This is untrue. The full claim element reads "a physical location of the environmental controller stored as location data in storage means in the controller". '739 Patent at claim 1. Given that the claim element itself already specifies that the location data is "*a physical location of the environmental controller*" it would be illogical and counterintuitive to construe the function of this claim element to include a limitation which is already present in the claim itself. As such, the Court should adopt Plaintiff's proposed construction of the function as "storing location data".

Defendant also argues that the specification fails to link the function to the structure. Br. at 24. This is also untrue. The specification states that the memory "stores data and program information". '739 Patent at 3:13-15; 2:8-10. It is axiomatic that the "location data" is "data" which is included in the data stored in the memory. '739 Patent at 7:32-41 ("The present embodiments of location data are for physical location of an environmental controller); 7:49-52 ("In a preferred form of the location data, a first environmental controller will have location data distinguishing it from all other environmental controllers."); *see also* 7:58-6:11 (describing location data as data). In fact, the '739 Patent stresses that unlike the prior art which "contains no environmental controllers that have geographical information, such as location data in the form of a zip code or telephone number, stored in them" the inventions described in the '739 Patent does include such data. *Id.* at 7:58-6:11. As such, the '739 Patent specification clearly links the function of "storing location data" to the associated structure of "memory". If the Court chooses to construe this term as a means-plus-function term, it should adopt Plaintiff's proposed construction.

2. *"means coupling suitable power for energizing said thermostat from said space conditioning equipment to said thermostat" ('825 Patent, Claims 1, 11)*

Plaintiff	**Defendant**

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Subject to § 112 ¶6 Structure: a (power) line and any equivalents Function: coupling suitable power for energizing said thermostat from said space conditioning equipment to said thermostat	Means plus function limitation Function: coupling suitable power for energizing said thermostat from said space conditioning equipment to said thermostat Structure: A power line connected to an isolation diode

The parties agree on the function for this term but disagree as to the structure. Defendant argues that the specification limits the structure to "a power line connected to an isolation diode" but this is simply incorrect. The passage that Defendant cites is a discussion of the prior art, not the inventions of the '825 Patent. '825 Patent at 5:3-5 ("In accordance with the prior art, power to the processor 1 is conventionally supplied from the space conditioning equipment 3 via a line 30 through an isolation diode 33."). Put simply, the specification contemplates a power line or any equivalents as the associated structure. As noted by Dr. Palmer one of skill in the art would readily understand the associated structure to be "a wire or line capable of carrying the small amount of current necessary to provide power for the purpose." Dkt. No. 60-6 at ¶ 117. This is broader in scope than Defendant's unnecessarily limited "a power line connected to an isolation diode". As such, the Court should adopt Plaintiff's proposed construction for this term and reject Defendant's attempt to unnecessarily limit the scope.

3. *"means for controlling space conditioning equipment" ('075 Patent, Claim 4)*

Plaintiff	**Defendant**
Subject to § 112 ¶6 Structure: virtual buttons operating with control programs including as described in 11:7-13:62 and any equivalents Function: controlling space conditioning equipment	Means plus function limitation Function: controlling space conditioning Equipment Structure: Indefinite

Both Plaintiff and Defendant agree this this term is a means-plus-function claim and also on the function. The sole disagreement is the structure. While Defendant has proposed this term

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is indefinite for failing to disclose a structure, "[t]he specification makes clear that the virtual buttons operating with control programs including as described in 11:7-13:62 is the structure that performs the function of controlling the space conditioning equipment as directed from the transferred functional programming." Dkt. No. 60-6 at ¶ 133. Furthermore, the specification clearly describes the structure and associates it with the function of controlling the space conditioning equipment. For example, in the description of Figure 10, the specification states

> Virtual button 110 can undergo step 111 in response to a user touch which also causes a change in the operating state of the invention programmable thermostat and a change of the legend associated with virtual button 110 to one of the virtual buttons in column 132. In the example, successive steps 133 to 137 indicate that a user has touched virtual button 110 one or more times to cause the operating state of the programmable thermostat and the legend of virtual button 110 to change . . .

'075 Patent at 11:16-24. Defendant argues that this term is indefinite because "Fig. 10 and the specification disclose a virtual button responding to a user's touch" and that the change "refers to changing the operating state of the thermostat, not 'controlling the space conditioning equipment'". Br. at 49. This is simply incorrect. For example, the algorithm discussed in the specification clearly describes at steps B through E changing the operational state of the space conditioning equipment. For example, at step B the space conditioning equipment switches "from 'off' mod to 'heat mode" while at step C it switches from "'heat mode' to 'cool mode'". The specification clearly discloses how the virtual buttons operating with the control program control the functions of the space conditioning equipment, rendering Defendant's arguments meritless. As such, this Court should adopt Plaintiff's proposed construction.

C. '555 Patent Terms

1. *"a communications interface adapted to establish bi-directional communications between said processor and a remote correspondent which is a source of current information"*

Plaintiff	Defendant

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No Construction Necessary Plain and Ordinary Meaning	Means plus function limitation. Function: establish bi-directional communications between said process and a remote correspondent which is a source of current information. Structure: Indefinite.

Defendant's contention that "communications interface is a means-plus-function limitation is wrong. Dr. Palmer was quite clear in confirming that:

> Specifically, a POSITA would understand that "a communications interface to establish bi-directional communications" describes a well-known and commonly used family of devices such as serial communications ports, ethernet ports, etc.

Dkt. No. 60-6 at ¶ 88. The term is not a "nonce" term as Defendant baselessly suggests. *See* Dkt. No. 61 at 17. In fact, in highly analogous circumstances, the United States District Court for the Eastern District of Texas found the term "communications interface" to be neither a means-plus-function term not indefinite. *MacroPoint, LLC v. Ruiz Food Products*, Case No. 6:16-cv-1133-RWS-KNM, 2018 U.S. Dist. LEXIS 23745 at *15-18 (E.D. Tex. February 14, 2018). There, the Court considered nearly the same arguments as those made here, including the legal arguments based on *Williamson*, and rejected them to construe the term. Furthermore, as in *MacroPoint*, that the remainder of the claim term may describe a function is irrelevant as this is not a means plus function term. In fact, the claimed communications interface interfaces between the claimed processor and the claimed remote correspondent which makes it clear that there is no need for the disclosure of an algorithm here. This is particularly so because this is not a means-plus-function term.

2. *"a first remote correspondent which is a source of current information"*

Plaintiff	**Defendant**
No Construction Necessary Plain and Ordinary Meaning	Indefinite

This term does not require construction and it is not indefinite. As Plaintiff stated in its Opening Brief, this term informs those of skill in the art about the scope of the invention with

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reasonable certainty. Dkt. No. 60 at 17-18. It, therefore, at least meets the requirements for definiteness set in *Nautilus*. *Id.* Dr. Palmer stated that "current information," is easily understood to be information of a time sensitive nature that has not been supplanted by more recent information. *Id.* Accordingly, the claim term is far from indefinite. Defendant's argument is entirely based on the false notion that one of skill in the art would not understand the meaning of the term because, in some instances, there may be more recent information available somewhere—as with respect to delayed stock quotes. This argument does nothing to dispel the fact that, as opined by Dr. Palmer, one of skill in the art would readily understand the term.

3. *"a program stored in said memory for displaying messages received from said remote correspondent"*

Plaintiff	**Defendant**
No Construction Necessary Plain and Ordinary Meaning	Means plus function limitation. Function: displaying messages received from said remote correspondent. Structure: Indefinite.

This claim term is easily understood by a POSITA and its usage within the specification and the claim is consistent with the understanding of a POSITA. Dkt. No. 60 at 18-19. Even if it were a means-plus function term—which it is not—the figures and accompanying discussion are disclosed in a degree of detail such that a person of skill in the art would know how to make the claimed program for displaying messages from said remote correspondent. *Id.* As Plaintiff has previously stated, Figures 1 and 7 and the discussion at column 5, lines 38-56 provides more than sufficient information for a POSITA to ascertain the scope of the invention and the steps necessary to accomplish the function. This disclosure is more than sufficient to provide the structure required. Furthermore, as also previously stated by Plaintiff, Dr. Palmer testified as follows:

Q. Can you explain to me what you mean by that last sentence?

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> A. Well, in a nutshell, the person of ordinary skill of the art who is building the thermostat is going to be selecting certain chipsets for the processor and for the display and so forth, and with those, those parts, there will be specific functions that would be implemented, often they'll be implemented as part of the chipset or preprogrammed into the chipset that would be for the purpose of displaying messages. And, so, the specifics of the code, for example, implementation of this program would not be necessary because it's going to be dependent on the specific chip sets that are used, but they're standard functions for sending signals to be displayed. And, so, somebody who is one of ordinary skill in the art would know how to make that, that display occur using the functions that are specific to the chipsets that they use.
>
> Q. Okay, so, are you suggesting that if a person of skill in the art would know how to make the, quote, claimed program for displaying messages, end quote, that the '555 patent doesn't need to disclose a specific algorithm?
>
> MR. MOORE: Objection, form.
>
> A. It does not need to disclose the specific code or the details of the algorithm, because the the procedure is well-known.

Id. Nothing in Defendant's argument rebuts this testimony. In fact, Defendant's argument seems to falsely suggest that specific code is required to meet the definiteness requirement here. It is not. Accordingly, the claim term is definite and does not need to be construed.

4. *"which received messages do not pertain to the operation of said thermostat system"*

Plaintiff	**Defendant**
No Construction Necessary Plain and Ordinary Meaning	Indefinite

This term does not require construction and it is not indefinite. As Plaintiff stated in its Opening Brief, this term informs those of skill in the art about the scope of the invention with reasonable certainty. Dkt. No. 60 at 19-20. It, therefore, at least meets the requirements for definiteness set in *Nautilus*. *Id*. Dr. Palmer stated that:

> A POSITA would readily understand that for any control system, there is information and data that pertains to the operation of the control system and there is data that does not. . . . Those parameters that are utilized in the control algorithms would clearly be understood as pertaining to the operation of the thermostat system.

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Dkt. No. 60-6 at 20. Accordingly, the claim term is far from indefinite. Defendant's argument is entirely based on the false notion that one of skill in the art would not understand the meaning of "pertains to." This argument is belied by Dr. Palmer's declaration and common sense. It does nothing to dispel the fact that, as opined by Dr. Palmer, one of skill in the art would readily understand the term.

D. '739 Patent Terms

1. *"a physical location of the environmental controller stored as location data in storage means in the controller"*

Plaintiff	Defendant
No Construction Necessary Plain and Ordinary Meaning	Storage means is a means plus function limitation Function: storing a physical location of the environmental controller Structure: Indefinite

Defendant incorrectly attempts to construe both "storage means" and this term together. As discussed above and in Plaintiff's opening brief, the term "storage means" is well-understood.

This term needs no additional construction beyond the term "storage means." Defendant's proposal to reword this claim to a means plus function term is improper and unnecessary. When read in context of preamble of claim 1 of "a location response system…comprising," a lay juror would readily understand that the claimed system includes a "storage" and "location data" stored in the storage correlates to "a physical location of the environmental controller."[2] No construction is needed to understand this therm.

2. *"transmitter means connected to the controller adapted to transmit location data to a remote device physically remote from the controller so that a location response is induced at the remote device"*

Plaintiff	Defendant

[2] Defendant's reliance on Dr. Palmer's depo is misplaced. Br. at 23. Dr. Palmer's testimony does not suggest or imply that a construction is necessary for this limitation. His testimony confirms that the claim language itself describes what location data is.

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No Construction Necessary Plain and Ordinary Meaning	Means plus function limitation Function: transmitting location data to a remote device physically remote from the controller so that a location response is induced at the remote device Structure: Modem with Internet or Network Connection

As previously discussed in Plaintiff's opening brief, a transmitter is recited here. A transmitter is well known structure and a mean plus function interpretation is unnecessary. "In deciding whether either presumption has been rebutted, the focus remains on whether the claim as properly construed recites sufficiently definite structure to avoid the ambit of § 112, P 6." *Personalized Media*, 161 F.3d at 704. Here, the recited transmitter is a known structure which transmits data and as such, no construction is necessary.

3. *"physically remote from the controller"*

Plaintiff	**Defendant**
No Construction Necessary Plain and Ordinary Meaning	Indefinite

As discussed in Plaintiff's Opening Brief, a POSITA and a jury would understand that a device that is outside of the space that is being environmentally controlled by the environmental controller would be remote from the controller.

Defendant cites Figs. 1 and 2 from the '739 Patent to argue that many items including the controller are outside "conditioned space 4." Br. at 27. However, Figs. 1 and 2 are not illustrations showing what is physically remote from the space being environmentally controlled. Rather, Figs. 1 and 2 are merely block diagram(s) of a first and second embodiment of a space conditioning system. 739 Patent, 2:46-54. As such, Defendant's argument fails here.

4. *"location response is storage of the location data at the remote device and correlation of the physical location to location response data stored at or available to the remote device or created by processing of location data at the remote device whereafter location response data is transmitted from the remote device to the controller"*

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Plaintiff	Defendant
No Construction Necessary Plain and Ordinary Meaning	Indefinite

This "location response" term is not indefinite because it does not claim any method steps. Instead, the claim only describes what location response is. In this case, the claimed "location response" is the storage of the location data at the remote device and that its correlated of the physical location to location response data stored at or available to the remote device or created by processing of location data at the remote device. Dr. Palmer's declaration makes clear that steps are undertaken to with regard to the location of the thermostat does not suggest that claim 1 is claiming a method, rather it's describing what the element "location response" is.

E. '318 Patent Terms

1. *"an input/output unit coupled between said processor and said touch screen for carrying out information transfer therebetween"*

Plaintiff	Defendant
No Construction Necessary Plain and Ordinary Meaning	Indefinite

This term is not indefinite, and it does not require construction. The meaning of the term is clear on its face, and Dr. Palmer very clearly opined that a POSITA would readily understand the meaning. Dkt. No. 60 at 25. Defendant attempts to create the impression that there is ambiguity based on a self-serving interpretation of the grammar of the claim. This cannot overcome the fact that a reading of the plain language informs those of skill about the scope of the invention with more than reasonable certainty. Accordingly, Defendant's argument should be rejected.

2. *"a control program stored in said memory for causing said central processing unit to communicate through said input/output unit to selectively: 1) establish on said liquid crystal display: a) a representation of a first virtual button at a first predetermined position on the liquid crystal display; and b) a first legend indicative of a first control function of said thermostat, which first control function is for controlling a first space conditioning equipment component, which first control function is active when the first legend is viewable; 2) read the position on the touch pad juxtaposed with said first*

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predetermined position on said liquid crystal display to determine if the representation of said first virtual button has been touched; 3) if the first virtual button has been touched: a) determining that the thermostat has been directed to control a second space conditioning equipment component; b) activating a second control function for controlling the second space conditioning equipment component; and c) displaying on said liquid crystal display a second legend indicative of said second control function of said thermostat, which second control function is for controlling the second space conditioning equipment component, which second control function is active when the second legend is viewable"

Plaintiff	**Defendant**
No Construction Necessary Plain and Ordinary Meaning	Means plus function limitation. Function: causing said central processing unit to communicate through said input/output unit to selectively: 1) establish on said liquid crystal display: a) a representation of a first virtual button at a first predetermined position on the liquid crystal display; and b) a first legend indicative of a first control function of said thermostat, which first control function is for controlling a first space conditioning equipment component, which first control function is active when the first legend is viewable; 2) read the position on the touch pad juxtaposed with said first predetermined position on said liquid crystal display to determine if the representation of said first virtual button has been touched; 3) if the first virtual button has been touched: a) determining that the thermostat has been directed to control a second space conditioning equipment component; b) activating a second control function for controlling the second space conditioning equipment component; and c) displaying on said liquid crystal display a second legend indicative of said second control function of said thermostat, which second control function is for controlling the second space conditioning equipment component, which second control function is active when the second legend is viewable. Structure: Indefinite.

As Plaintiff previously stated, where a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function format. *See, e.g., Cole v. Kimberly-Clark Corp.*,

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102 F.3d 524, 41 USPQ2d 1001 (Fed. Cir. 1996). This precedent applies here. Accordingly, the claim term is definite and does not need to be construed. The cases Defendant relies on are inapposite because they because they address whether the specification discloses sufficient corresponding structure to support a means-plus-function claim after § 112 ¶ 6 has been invoked, not whether the claim recites "sufficiently definite structure" to avoid the invocation of § 112 ¶ 6. *See Techno View IP, Inc. v. Facebook Techs., LLC*, 2018 U.S. Dist. LEXIS 207316, 2018 WL 6427874, at *5 n.6 (D. Del. Dec. 7, 2018) ("Aristocrat rule . . . applies only after Section 112, paragraph 6 has been invoked; it does not apply when determining whether the statute should be invoked.") Where, as here, the claim elaborates sufficient acts to perform the recited function, the claim term is not a means-plus-function claim term. Accordingly, Defendant's arguments should be rejected.

3. *"the graphic"*

Plaintiff	**Defendant**
No construction necessary.	Indefinite: No antecedent basis.

As Plaintiff previously stated, when read in context of the claims themselves, the term "the graphic" would be understood with reasonable certainty by a POSITA. Dkt. No. 60 at 28. When the claims are read in the proper context, the term "the graphic" very clearly refers to a graphic associated with a virtual button of a legend indicative of a control function. *Id.*; Dkt. No. 60-6 at ¶¶ 111-117. Claim 4 provides the antecedent basis for the term, stating "if the first virtual button is been touched again…changing the second legend to a third legend indicative of the third control function of the thermostat." It follows that the term "the graphic" in dependent claims refers to a graphic associated with a virtual button legend indicative of a control function, and that is what one of skill in the art would understand the term to mean. *Id.* The term is not indefinite. Defendant complains of Dr. Palmer's description of what the claim term refers to as "a graphic." However,

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Dr. Palmer contends that the term need not be construed. He did not offer a proposed construction. Plaintiff agrees that, if a construction of term were necessary, "the graphic associated with a virtual button of a legend indicative of a control function" would be appropriate. However, the term is not indefinite as suggested by Defendant.

F. '825 Patent Terms

4. *"real time clock"*

Plaintiff	Defendant
No Construction Necessary Plain and Ordinary Meaning	An off the shelf real time clock integrated circuit component that does not have a battery or other backup device in case of a power failure

Defendant's proposed construction goes against the plain language of the claim term. A "real time clock" needs no construction. Defendant's brief argument of disclaimer fails. Br. at 39-41.

First, with respect to Defendant's argument that the patent, specification, and the inventor all characterize the invention of the '825 Patent as a "fail safe" real time clock, there is no dispute here. *Id.* at 39-40. The crux of the invention is captured in the claims, for example, all of the limitations in claim 1 taken as a whole describe a programmable thermostat for controlling space conditioning equipment having a fail safe real time clock functionality. Defendant's proposal to construe the claim term "real time clock" to "an off the shelf real time clock integrated circuit component that does not have a battery or other backup device in case of a power failure" is unnecessary.

Defendant further contends that "the specification makes quite clear that a real time clock with a 'battery or other device' is **not** a fail safe real time clock." Br. at 40 (emphasis in original). Plaintiff does not disagree with this. The '825 Patent makes clear that a normal real time clock with or without a battery backup is not a "fail safe" real time clock. Indeed, the '825 Patent describes the "fail safe" aspect due to the inclusion of a "a real time clock and a non-volatile

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random access memory in which the current time and date are periodically read from the real time clock into the random access memory" as seen in FIG. 2 below. '825 Patent, 3:2-5.

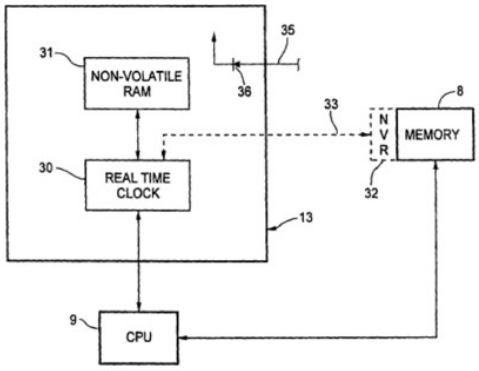


FIG. 2

In the invention it does not matter whether a "real time clock" has or does not include a battery backup. The "fail safe" aspect of the invention is that the time and date are periodically backed up into non-volatile memory. This can work with a clock having a battery backup or no battery backup. Defendant's attempt to construe this term to remove any clocks with a battery backup should be rejected.

G. '075 Patent Terms

5. *"functional programming"*

Plaintiff	Defendant
No construction necessary.	Discrete executable code that changes a previously existing function or virtual button or adds a new function or virtual button and does not include data-only transfers.

Defendant's argument that the proper construction of this term points out a single statement from the specification and attempts to claim that statement amounts to a disclaimer. Br. at 42. Defendant cites *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007) for the proposition that "When a patent thus describes the features of 'the present invention' . . . this description limits the scope of the invention." Br. at 42. While the specification does say

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that functional program "does not include data-only transfers" this is insufficient to so limit the construction. *See Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1373 (Fed. Cir. 2014) cert. denied, 135 S. Ct. 719, 190 L. Ed. 2d 463 (2014) ("There are no magic words that must be used, but to deviate from the plain and ordinary meaning of a claim term to one of skill in the art, the patentee must, with some language, indicate a clear intent to do so in the patent."). Here the patentee clearly did not intend to limit the scope and stated, "without specifically limiting such a definition". '075 Patent at 10:35-36. Furthermore, the specification "states that functional programming only 'in part' changes or adds to one or more previous functions." Dkt. No. 60-6 at ¶ 144 (quoting '075 Patent at 4:8-11). In addition, the specification states that functional programing received can be for the purpose "that representations of information or touch sensitive buttons on a liquid crystal display are changed from those available to the thermostat before said receipt of functional programming." *Id.* at 3:16-20. In other words, the specification itself contemplates changing the "information" displayed rather than "virtual buttons" or a "new function" as professed by Defendant. *Id.* at 3:16-20; *see also* 4:8-11; 10:34-35 ("Without specifically limiting such a definition, functional programing . . . includes"). In other words, the specification undercuts Defendant's argument that the patentee disclaimed non-data only transfers, and Defendant's construction is therefore incorrect.

6. *"a control program stored in said memory for causing said central processing unit to selectively: 1) establish on said liquid crystal display one or more representations of buttons at a separated and predetermined positions; 2) read the position on the touch pad juxtaposed with said predetermined position to determine if said representation of a button has been touched; and 3) if said a representation of a button has been touched, processing this information to establish a condition incorporated into the operation of said thermostat system; 4) establish communications between said processor and a first remote correspondent from which is transferred to said memory one or more modules of functional programming; and 5) operate said transferred functional programming to change or add to representations on the touch screen, where said changes or additions of representation on the touch screen were not available to the control program before their transfer to the memory"*

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Plaintiff	Defendant
No Construction Necessary Plain and Ordinary Meaning	Means plus function limitation Function: causing said central processing unit to selectively: 1) establish on said liquid crystal display one or more representations of buttons at a separated and predetermined positions; 2) read the position on the touch pad juxtaposed with said predetermined position to determine if said representation of a button has been touched; and 3) if said a representation of a button has been touched, processing this information to establish a condition incorporated into the operation of said thermostat system; 4) establish communications between said processor and a first remote correspondent from which is transferred to said memory one or more modules of functional programming; and 5) operate said transferred functional programming to change or add to representations on the touch screen, where said changes or additions of representation on the touch screen were not available to the control program before their transfer to the memory; Structure: Indefinite.

As Plaintiff previously stated, where a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function format. *See, e.g., Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 41 USPQ2d 1001 (Fed. Cir. 1996). This precedent applies here. Accordingly, the claim term is definite and does not need to be construed. The cases Defendant relies on are inapposite because they because they address whether the specification discloses sufficient corresponding structure to support a means-plus-function claim after § 112 ¶ 6 has been invoked, not whether the claim recites "sufficiently definite structure" to avoid the invocation of § 112 ¶ 6. *See Techno View,* 2018 WL 6427874, at *5 n.6 ("Aristocrat rule . . . applies only after Section 112, paragraph 6 has been invoked; it does not apply when determining whether the statute should be invoked.") Where, as here, the claim elaborates sufficient acts to perform the recited function, the

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claim term is not a means-plus-function claim term. Accordingly, Defendant's arguments should be rejected.

7. *"in which said communications interface is coupled to an external modem"*

Plaintiff	**Defendant**
No Construction Necessary Plain and Ordinary Meaning	Indefinite

Defendant's argument that this term is indefinite is that one of skill in the art would not understand "the scope and boundaries of 'externa'". Defendant makes this argument despite the fact that an "external modem" is a commonly used term of art, which even a layman would have familiarity with. Such terms simply do not require construction. *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (Claim construction "is not an obligatory exercise in redundancy."). Furthermore, Defendant's argument that the "temperature sensor may be located inside or outside the house" is based upon a flawed reading of the specification which allows for "remote temperature sensors" as shown in figures 1-4. '075 Patent at Figs. 1-4. In addition, the specification states that the "external modem" is "external (to the thermostat system)" and that it is connected via serial link 16. *Id.* at 8:53-59. This is in direct contrast to the specification's contemplation of an "internal modem" which is "integrated into the communications interface". *Id* at 8:66-9:2. One of skill in the art would therefore clearly be able to determine this term is used in accordance with its plain and ordinary meaning, *i.e.,* a modem which is not "integrated" into the communications interface and requires no construction and is no way indefinite.

III. CONCLUSION

For the foregoing reasons, the Court should adopt Plaintiff's proposed constructions or, where requested by Plaintiff, apply the plain and ordinary meaning of the terms. Many of the claim terms at issue do not require construction. Furthermore, contrary to Defendant's contentions, none of the claim terms are indefinite.

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CERTIFICATE OF SERVICE

I hereby certify that on the 11th day of May, 2023, I served the foregoing on counsel of record for Defendant via the Court's ECF system.

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