

IN THE UNITED STATES DISTRICT COURT
DISTRICT OF UTAH, CENTRAL DIVISION

<p>LUTRON ELECTRONICS CO., INC., Plaintiff, v. CONTROL4 CORPORATION, Defendant.</p>	<p>MEMORANDUM DECISION AND ORDER CONSTRUING CLAIMS PURSUANT TO <i>MARKMAN</i> HEARING</p> <p>Case No. 2:06-cv-00401 CW Judge Clark Waddoups</p>
---	---

Plaintiff Lutron Electronics Co., Inc. (“Lutron”) owns several patents relating to a lighting control device that can be controlled remotely by radio frequency signals. At issue in this dispute are two of the patents: U.S. Patent Nos. 5,905,442 (the “442 Patent”) and 5,982,103 (the “103 Patent”). Lutron asserts that Control4 Corporation (“Control4”) has infringed various claims of both patents.

The parties dispute the construction of twenty-four terms used in the claims.¹ On December 4, 2008, the Court conducted a hearing pursuant to *Markman v. Westview Instruments, Inc.*,² for the purpose of construing such terms. The Court has considered the parties’ written submissions, as well as the arguments made at the hearing. This Order addresses the construction of the disputed claims.

¹ For consistency, the numbering of the disputed terms in this decision corresponds to the numbering used during the *Markman* hearing. Gaps in the numbering of terms means a term was agreed upon by the parties prior to the *Markman* hearing, and will therefore not be included in this decision.

² 52 F.3d 967 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996).

BACKGROUND

In the 1990s, Lutron began developing a lighting control system that could be installed in existing homes or buildings without having to re-wire the existing structure.³ One of the system capabilities is to provide two-way radio frequency (“RF”) communication between a master control unit and a lighting control device such as a dimmer. The RF communication carries a control signal to change the status of the electrical device, such as its on/off state or intensity level. The RF communication also carries a status signal back to the master control unit to report the status of the electrical device. The status signal reflects the status of the electrical device regardless of whether status is changed by a control signal or locally by a manual actuator. Thus, a person in one room can know the status of each electrical device in other rooms that are linked into the lighting control system.

During the patent prosecution, Lutron distinguished its invention from prior art on the basis that its system reports the status of the electrical device regardless of whether status is changed by a control signal or a manual actuator. According to Lutron, some prior art reported status, but the status was unreliable because it could not track status changes under a dual load system. To ensure this concept of “true status” was reflected in its claim language, Lutron had to amend its ‘442 Patent application to add in the phrase “as affected by the control information and the manual actuator” to certain claims. Upon doing so, the patent was approved.

³ Although Lutron largely focuses on a lighting control system in its patents, the system and antenna can be used to control other electrical devices, such as security systems, appliances, and HVAC (heating, ventilation, and air conditioning) systems. ‘442 Patent, col. 1:51–57; ‘103 Patent, col. 1:40–46.

Lutron also designed its system so that the antenna transmitting RF signals is small enough to fit behind the faceplate of an electrical wallbox. Sizing an antenna to fit in a small, inhospitable space was a significant challenge to overcome according to Lutron. In its '103 Patent, Lutron distinguishes its antenna from the antenna in a patent owned by Heath Zenith. Lutron states the following about the Heath Zenith antenna:

the hardwired receiving switch includes a whip antenna made from a piece of insulated wire which is allowed to dangle out of the electrical box either outside the building wall or inside the wall. In the case where the whip antenna is allowed to dangle outside the wall, an unattractive, aesthetically displeasing appearance is obtained. In the case where the whip antenna is allowed to dangle inside the wall, although hidden, the wire creates reception and installation problems as well as a danger that the wire may become shorted to other cables or grounds, presenting an electrical hazard or preventing the antenna from working.⁴

By designing its antenna to fit behind the faceplate, Lutron's antenna dangles neither outside of the wall nor inside of the wall.

In 2003, Lutron had to defend its '442 and '103 Patents when Vantage Controls, Inc. filed suit against Lutron.⁵ The case settled before trial, but the court issued a *Markman* order regarding the '442 Patent before it settled. In approximately 2005, Control4 began marketing home automation products that control lights, audio/visual systems, and other electrical systems by RF communication. In 2006, Lutron filed suit against Control4 for infringement.

⁴ '103 Patent, col. 2:54–67.

⁵ See *Vantage Controls, Inc. v. Lutron Elecs. Co., Inc.*, Case No. 2:03-cv-0048 TC (D. Utah 2003).

ANALYSIS

“Claim construction is a question of law” for the Court to determine.⁶ “Claim terms are generally construed in accordance with the ordinary and customary meaning they would have to one of ordinary skill in the art.”⁷ Such a person “is deemed to [have] read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.”⁸ Thus, “[c]laims must be read in view of the specification, of which they are a part.”⁹

“The specification contains a written description of the invention that must enable one of ordinary skill in the art to make and use the invention.”¹⁰ Because the specification explains the invention, it “may act as a sort of dictionary” for defining “terms used in the claims.”¹¹ It therefore “is the single best guide to the meaning of a disputed term.”¹²

In addition, “the court may . . . consider the prosecution history of the patent, if in evidence.”¹³ If the prosecution history contains express representations about the scope of a claim,

⁶ *ILOR, LLC v. Google, Inc.*, No. 2008-1178, 2008 U.S. App. LEXIS 24992, *5 (Fed. Cir. Dec. 11, 2008) (citations omitted).

⁷ *Netcraft Corp. v. Ebay, Inc.*, No. 2008-1263, 2008 U.S. App. LEXIS 25031, *6 (Fed. Cir. Dec. 9, 2008) (citations omitted).

⁸ *Id.* at *6–7

⁹ *Markman*, 52 F.3d at 979 (citations omitted).

¹⁰ *Id.*

¹¹ *Id.* (citations omitted).

¹² *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

¹³ *Id.* (citation omitted).

the prosecution history may be of “critical significance in determining the meaning of claims.”¹⁴ Nevertheless, “because the prosecution history represents an ongoing negotiation between the [Patent and Trademark Office] and the applicant . . . it often lacks the clarity of the specification.”¹⁵ Consequently, it “is less useful for claim construction purposes.”¹⁶

Within these guidelines, the Court construes the terms in dispute.

I. ‘442 PATENT TERMS DISPUTED BY THE PARTIES.

The following are the terms in dispute for the ‘442 Patent, and the Court’s construction of the terms.

A. Term 3: Controllably conductive device for adjusting the status of said electrical device (as used in claim 1).

Lutron contends that Term 3 means “A controllably conductive device for adjusting the status of the electrical device (which may include the on/off state, the intensity level, or both, of the electrical device).” Control4 contends the term means “A controllably conductive device for adjusting the status of the electrical device (which may include but is not limited to the on/off state, the intensity level, or both, of the electrical device).”

Lutron did not limit its patent to lighting control only. Instead, it specified its control device could be used in security systems, HVAC systems, computer systems, and audio/visual systems. Due to these inclusions, Control4 argues that status feedback may include more information than

¹⁴ *Id.* (citation omitted).

¹⁵ *Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1372 (Fed. Cir. 2007) (quotations and citations omitted) (ellipses in original).

¹⁶ *Id.*

just a device's on/off state or intensity level. For example, it may include the status of a damper on a heating or cooling system.

Neither claim 1 nor the specification limits status feedback solely to the intensity level of a light or its on/off state. The construction therefore should not contain this limitation. Additionally, because “[c]laim construction is for the purpose of explaining and defining terms in the claims,” it “usually requires use of words other than the words that are being defined.”¹⁷ Based on these factors, the Court concludes the term means “A controllably conductive device for altering the condition of the electrical device (such as, the on/off state or intensity level of the electrical device).”

B. Term 4: A manual actuator for adjusting the status of the electrical device (as used in claims 1 and 62).

Lutron contends that Term 4 means “A manual actuator, such as a button, knob, or touch screen element, for adjusting the status of the electrical device.” Control4 contends the term means “A manual actuator for adjusting the status of the electrical device (which may include but is not limited to the on/off state, the intensity level, or both, of the electrical device).” Lutron’s definition focuses on defining a manual actuator, while Control4’s definition focuses on defining status. The distinction between this term and Term 3 is the use of the phrase “manual actuator” in place of “controllably conductive device.” Otherwise, they are the same.

The parties stipulated to the definition of a controllably conductive device. Thus, in Term 3, the Court focused on defining the phrase “for adjusting the status of the electrical device.” Because that phrase was defined in Term 3, focusing on the definition of manual actuator in this claim is correct.

¹⁷ *Abbott Labs v. Sandoz, Inc.*, 544 F.3d 1341, 1360 (Fed. Cir. 2008) (citation omitted).

The claim does not define “manual actuator.” The specification indicates the manual actuating device allows the user to change the status of the electrical device, and an embodiment refers to a button when discussing the manual actuator.¹⁸ While the embodiment provides this example, it would be inappropriate to import this limitation from the embodiment because there is no evidence that Lutron intended to limit a manual actuator only to buttons.¹⁹ Thus, other mechanisms, such as a knob or touch screen sensor, fall within the meaning of “manual actuator.” Providing such examples helps to explain what constitutes a manual actuator.

Control4 argues, however, that a jury does not need any examples of what constitutes a manual actuator because the concept is simple. Additionally, because Control4's device contains a touch screen, Control4 contends that including a touch screen sensor as an example would be akin to granting Lutron summary judgment on this issue. Notably, Control4 does not refute that a touch screen sensor is a manual actuator. It merely argues that it should not be included in the definition because its device contains a touch screen. The Court is not persuaded that a “touch screen sensor” should be excluded from the definition merely because Control4's device contains a touch screen. Because the use of examples does help explain what constitutes a manual actuator, the Court concludes the meaning of the term is “A mechanism, such as a button, knob, or touch screen sensor, for altering the condition of the electrical device.”

¹⁸ ‘442 Patent, col. 23:62–63. The description of the drawings indicates that the “button” (meaning the actuator) is assigned to a specific lighting control device. ‘442 Patent, col. 10:18–21. The detailed description of the embodiments speaks about buttons in the context of how they are programmed to implement certain functions. ‘442 Patent, 16:64–67.

¹⁹ See *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004).

C. Term 5: Control information (as used in claims 1, 32, 62, and 84).

Initially, Lutron proposed the following construction: “Information that is used by the apparatus to control the electrical device.” In turn, Control4 argued Term 5 means “Information used by the control device to adjust the status of the electrical device.” The dispute between the parties largely focused on the component or device that uses control information. This is an unnecessary addition to the term. During the *Markman* hearing, the parties agreed upon the following construction: “Information that is used to change the state of the electrical device.” This construction is consistent with use of the term in the patent. The Court therefore adopts this definition.

D. Term 6: A status radio frequency signal having status information therein (as used in claims 1 and 84).

During the *Markman* hearing, the parties agreed the language following the word “signal” should be deleted from the term because the language is addressed elsewhere and may complicate construction of the term. Hence, the modified term for construction is “A status radio frequency signal.” Once the term was shortened, the parties agreed during the hearing to the following meaning: “A signal transmitted wirelessly by an antenna.” This construction is consistent with use of the term in the patent. The Court therefore adopts this definition.

E. Term 7: Status information (as used in claims 1, 32, and 84).

Lutron contends that Term 7 means “Information regarding the status of the electrical device.” Control4 contends the term means “Information regarding the status of the electrical device, which may include, but is not limited to, the on/off state, the intensity level, or both, of the electrical device.”

Consistent with its construction of Term 3 in section I.A above, the Court concludes the meaning of the term is “Information about the condition of the electrical device (such as the on/off state or intensity level of the electrical device).”

F. Term 8: Status information therein regarding the status of the electrical device as affected by the control information and the manual actuator (as used in claim 1).

Lutron contends the term means “Information about the status of the electrical device, whether the electrical device is being controlled based on control information or based on adjustment of the manual actuator of the control device.” Control 4 contends it means “Information regarding the effect that the control information and the manual actuator have had on the status of the electrical device.”

Control4's construction introduces a “timing” element because it speaks about the effect the control information and manual actuator *have had* on the status of the electrical device. Control4 argues this limitation was included by Lutron during the patent prosecution history because Lutron represented that its device reflects the “true status” of the electrical device, which distinguished it from the prior art. Control4 also cites to the patent to support its assertion.

The patent states the apparatus “is capable of manual actuation . . . which transmits a signal regarding the status of the control electrical device *upon actuation*.”²⁰ The patent also states:

It provides, unlike any prior art system, the ability to know the status of each light fixture from the remote master station. The status indicated at the master station is the true status of each light fixture. When a control device (dimmer) changes the status of a lamp, either

²⁰ ‘442 Patent, col. 5:2–4 (emphasis added).

because of a command from a master or a manual actuation, it returns a status signal to the master.²¹

According to the Control4, this shows a cause and effect relationship. Once status is changed, *then* the status is reported.

Lutron contends these statements need to be put in context. The prior art either had no manual actuator or had no accurate status feedback when the manual actuator changed the status of an electrical device. In other words, if the status of the electrical device was changed by a manual actuator, the status indicator would not necessarily reflect the electrical device's true status.

During the patent prosecution, Lutron represented that "true status herein means that if the status of the controlled electrical device is changed either by an action initiated at the master unit or at the control device, the status displayed at the master unit will be correct."²² This same concept is included in the patent's description of embodiments of the invention.²³

Reading the prosecution history and patent as a whole, it is apparent the concept of "true status" focuses on the ability of the apparatus to report the status of an electrical device even though the load status can be altered at two different sources. Whether the status signal is sent microseconds before the change, concurrently with the change, or microseconds after the change is

²¹ '442 Patent, col. 30:19–25.

²² See Appendix in Support of Lutron's Brief in Support of Lutron Electronics Co., Inc.'s Proposed Claim Construction, Prosecution History of U.S. Patent No. 5,905,442, Ex. C, at A298 (emphasis in original) (docket no. 46).

²³ See '442 Patent, col. 23:61–24:5 (discussing that true status will be displayed regardless of whether the electrical device's status is changed by the manual actuator or the control device).

irrelevant because “true status” does not incorporate an exact timing element. Instead, it only indicates that the status report will be correct regardless of whether the status is changed by control information or the manual actuator.

For these reasons, the Court construes the term to mean “Information about the condition of the electrical device, regardless of whether the condition of the electrical device is being directed by control information or by the manual actuator.”

G. Term 9: At least one actuator (as used in claims 1, 32, 62, and 84).

Lutron contends that Term 9 means “At least one mechanism, such as a button, knob or touch screen element, used to operate the unit.” Control4 contends it means “one or more manual actuators.” Control4 objects to Lutron’s inclusion of the phrase “touch screen” for the same reasons stated in section I.B above.

This phrase applies to the master control unit only. Used in context, the claims state: “a master control unit having at least one actuator and status indicator thereon.” Although the term “manual” is incorporated into the claims when the actuator on the control device is described, “manual” is not included when the actuator on the master control unit is described. Consequently, a definition that incorporates the term “manual” likely would introduce a limitation in the claim. Otherwise, the definition should be consistent with Term 4 defined in section I.B above. The Court therefore concludes the term means “At least one actuator, such as a button, knob, or touch screen sensor.”

H. Term 10: Status indicator (as used in claims 1, 4, 32, 62, 66, and 84).

Lutron contends that Term 10 means “A display element, such as an LED or screen, for indicating the status of the electrical device.” Control4 contends the term means “A display element

for indicating the true status of the electrical device.” Control4 wants the word “true” included before the word “status,” while Lutron opposes this addition due to limitations it might unintentionally introduce, such as a timing element. In turn, Control4 opposes inclusion of the word “screen” for the same reason stated in sections I.B and I.G above.

The status indicator is located on the master control unit in each of the relevant claims. In the *Vantage Controls, Inc.* case, Lutron stipulated that the status indicator reflects the “true status” of the electrical device.²⁴ Based on this stipulation, Control4 contends Lutron should be estopped from arguing against inclusion of this phrase.

After the parties stipulated to the construction of certain terms in the *Vantage Controls, Inc.* case, Vantage Controls, Inc. then argued that “true status” reflected a timing element because “there is no way to verify that the status has actually changed until after the change has actually occurred.”²⁵ Lutron opposed this statement on the ground “that the term only requires that the master control unit be correctly updated, whether the electrical device is being controlled from the control device or the master control unit.”²⁶ In its *Markman* order in the *Vantage Controls, Inc.* case, the court concurred with Lutron, and rejected Vantage Controls, Inc.’s attempt to include a timing element.²⁷ Lutron therefore opposes including “true status” in this case to avoid the same problem.

²⁴ *Vantage Controls, Inc. v. Lutron Electronics Co., Inc.*, No. 2:03-cv-488, Stipulated Claim Construction Statement, Ex. A, at 2 (D. Utah June 3, 2005) (docket no. 85).

²⁵ *Id.*, Markman Order, at 5 (D. Utah Dec. 16, 2005) (docket no. 236).

²⁶ *Id.* This is the same argument offered by Lutron in this case.

²⁷ *Id.*

The United States Court of Appeals for the Federal Circuit has concluded that the rulings in a prior case on claim construction do not necessarily “preclude a patentee from arguing for a different claim construction in an action brought” later.²⁸ Three factors the Federal Circuit has considered to determine whether a prior claim construction has preclusive effect include: (1) whether a party was fully heard during an evidentiary hearing in the prior action regarding the claim construction; (2) whether the court “put the parties on notice that the orders could have preclusive effect;” and (3) whether the court entered a final order that approved settlement if the case ended before trial.²⁹

In *Vantage Control, Inc.*, Lutron stipulated to use of the phrase “true status,” and had the opportunity to oppose Vantage Control, Inc.’s construction during the *Markman* hearing. The first element therefore has been met. Notably, however, the court concurred with Lutron that “true status” does not incorporate a timing element. Thus, while the first element is met, it weighs in favor of excluding the word “true” to avoid the same problem in this case.

The latter two elements are not met because the court did not indicate its order would have a preclusive effect, nor did the court approve the final agreement between the parties when the *Vantage Control, Inc.* case settled. As a result, Lutron may argue for a different claim construction than the one to which it previously stipulated. Furthermore, the Court concurs with the prior ruling in *Vantage Controls, Inc.* that a timing element was not included by Lutron when it referred to status

²⁸ *Dana v. E.S. Originals, Inc.*, 342 F.3d 1320, 1323 (Fed. Cir. 2003).

²⁹ *RF Delaware, Inc. v. Pacific Keystone Techs.*, 326 F.3d 1255, 1262 (Fed. Cir. 2003).

as “true status.”³⁰ To avoid the potential for adding in this limitation, the Court declines to insert the word “true” in its construction.

With respect to including an LED or screen as examples, the patent diagrams and specification specifically refer to an LED when discussing a status indicator.³¹ The type of status indicator is not limited just to an LED, however, and a screen falls within the scope of the term. The Court therefore construes the term to mean “A display element, such as an LED or screen, for indicating the condition of the electrical device.”

I. Term 11: Status indicator indicating the status of the electrical device in response to the status information (as used in claim 1).

Lutron contends that the meaning of Term 11 is clear and no construction is necessary. In contrast, Control4 contends the term means “The status indicator indicates the true status of the electrical device (which may include but is not limited to the on/off state, the intensity level, or both, of the electrical device) as indicated by the status information. (‘True status’ means that if the status of the controlled electrical device is changed either by the master unit or by the control device, the status displayed at the master unit will be correct.)”

“The purpose of claim construction is to determine the meaning and scope of the patent claims asserted to be infringed.”³² When the parties dispute the meaning or scope of the patent

³⁰ See discussion in section I.F above.

³¹ See e.g., ‘442 Patent, col. 23:17–37.

³² *02 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quotations, citation, and alteration omitted).

claims, “the court, not the jury, must resolve that dispute.”³³ Here, the parties disagree about whether the term should be construed and if it is construed, what its meaning is. Based on the Court’s prior reasoning in sections I.E, I.F, and I.H, the Court concludes that Term 11 means “A display element, such as an LED or screen, that indicates the condition of the electrical device (such as the on/off state or intensity level of the electrical device), regardless of whether the condition of the electrical device is being directed by control information or by the manual actuator.”

J. Term 14: Includes the intensity level setting of the control device controlling the intensity level of the lamp (as used in claims 27, 58, and 80).

Lutron contends either no construction is necessary for Term 14, or alternatively, that it means “The status includes, but is not necessarily limited to, the intensity level setting of the control device controlling the intensity level of the lamp.” Control4 contends the term means “Includes information about the intensity level setting of the controllably conductive device.”

The parties dispute whether the “intensity level setting of the control device” means “the intensity level setting of the controllably conductive device.” Control4 contends that it is the controllably conductive device that controls a lamp’s intensity level. Consequently, that phrase should be included in the construction rather than the broader “control device” phrase.

The language in the relevant claims refers to the control device, not the controllably conductive device. The specification states the objective of “controlling at least one electrical device” is achieved through a control device that is connected to an electrical device.³⁴ It then states

³³ *Id.*

³⁴ ‘442 Patent, col. 5:17–20.

the control device includes both a controllably conductive device, and “a radio frequency transmitter/receiver and antenna coupled thereto for adjusting the status of the electrical device in response to control information.”³⁵ This indicates that it is the control device, not just the controllably conductive device, that controls the lamp’s intensity level. Referring only to the controllably conductive device would impermissibly limit the meaning and scope of the relevant claims.

The Court concludes the term means “Includes, but is not limited to, the intensity level setting of the control device that is directing the lamp’s intensity level.”

K. Term 15: Providing a manual actuator at the control device for adjusting the status of the electrical device (as used in claims 32 and 84).

Lutron contends that Term 15 means “The control device is provided with a manual actuator, such as a button, knob, or touch screen element, for adjusting the status of the electrical device.” Control4’s does not offer a separate construction. Rather it states, “See ‘a manual actuator for adjusting the status of the electrical device’ above.” Control4 correctly notes that much of this term has been construed already in section I.B. This term is distinguished from Term 4 in section I.B, however, by inclusion of the phrase “at the control device.” The phrase provides information about where the manual actuator is located. Consequently, it should be included in the definition. Consistent with section I.B, the Court concludes that Term 15 means “ The control device is provided with a mechanism, such as a button, knob, or touch screen sensor, for altering the condition of the electrical device.”

³⁵ ‘442 Patent, col. 5:23–26.

L. Term 16: Transmitting status information in a radio frequency signal from the control device regarding the status of the electrical device as affected by the control information and the manual actuator (as used in claim 32).

Lutron contends that Term 16 means “Transmitting from the control device a radio frequency signal containing status information regarding the status of the electrical device, whether the electrical device is being controlled based on the control information or based on adjustment of the manual actuator on the control device.” Control4 contends the term means “Transmitting from the control device a radio frequency signal containing information regarding the effect that the control information and the manual actuator have had on the status of the electrical device.”

Again, the difference between the parties’ construction involves whether a timing element should be included in the definition. For the reasons stated in discussing Terms 8 and 10, in sections I.F and I.H, introduction of a timing element in this term would impose a limitation that is not present in the patent. The Court concludes the term means “Sending from the control device a radio frequency signal containing information about the condition of the electrical device, regardless of whether the condition of the electrical device is being directed by control information or by the manual actuator.”

M. Term 18: Status information therein regarding the status of the electrical device after adjustment of the status in response to the control information as affected by the control information and the manual actuator (as used in claim 84).

Lutron contends that Term 18 means “Information regarding the status of the electrical device, whether the electrical device is being controlled based on control information or based on adjustment of the manual actuator of the control device.” Control4 contends it means “Information regarding the true status of the electrical device after adjustment in response to the control

information, where the status information indicates the effect that the control information and the manual actuator have had on the status of the electrical device.”

The disputed term in the claim is essentially the same as Term 8, discussed in section I.F above, except it adds on the following language in the middle of the term: “*after* adjustment of the status in response to the control information.” (Emphasis added.) Claim 84 provides a method for controlling the electrical device discussed in claim 62. Claim 62 requires a command signal that changes the status of the electrical device, without use of a repeater. Otherwise, claim 62 is substantially similar to claim 1. While the apparatus claims are substantially similar, this method claim does involve a specific timing element through use of the term “*after*.” Because this is a limitation, the claim construction should include the added phrase.

The term has an internal conflict, however, because of another phrase. On the one hand, the term states that status is adjusted in response to control information. On the other hand, it states that status is affected by the control information *and* the manual actuator. A main point Lutron made to distinguish this invention from prior art is that status can be changed either by control information or by the manual actuator. That point is present throughout the patent, and was reaffirmed during the *Markman* hearing when Lutron indicated the phrase “in response to the control information” likely was a drafting error when Lutron modified the claim language during the patent prosecution.

The term is clearer when that phrase is removed. Nevertheless, “courts may not redraft claims to cure a drafting error made by the patentee,” unless the error “is an obvious administrative or typographical error not subject to reasonable debate.”³⁶ The exception does not appear to apply

³⁶ *Lucent Techs., Inc. v. Gateway, Inc.*, 525 F.3d 1200, 1215 & n.8 (Fed. Cir. 2008) (citations omitted).

here. Consequently, the Court concludes the term means “Information about the condition of the electrical device, after the condition has been altered in response to the control information, regardless of whether the condition of the electrical device is being directed by control information or by the manual actuator.”

N. Term 19: A remotely controllable lighting control device for controlling an electric lamp (as used in claim 151).

The parties agree that Term 19 requires no construction, but Lutron asks for a ruling that the preamble is limiting. For a preamble to be limiting, the applicant must “use[] both the preamble *and* the body of the claim to define the subject matter of the claimed invention.”³⁷ If “it is used only to state a purpose or intended use for the invention and the structurally complete invention is defined in the body of the claim, the preamble is not a limitation.”³⁸

Here, the preamble helps define the subject matter by specifying the control device is a lighting control device that is remotely controlled. Because the preamble provides this meaning, it does more than merely state the purpose or use of the invention. Thus, the Court concludes the preamble is limiting.

O. Term 20: Transmitting status signals via radio frequency transmission (as used in claims 151 and 156).

Lutron contends that “‘Radio frequency transmission’ means transmission of radio frequency signals through the air by an antenna,” and that no further construction is required. Control4

³⁷ Herbert F. Schwartz, *Patent Law & Practice*, at 148 (5th ed. 2006) (emphasis in original).

³⁸ *Id.* at 148–49.

contends that Term 20 means “Adapted to transmit a series of communications that indicate the true status of the lamp via radio frequency transmission.”

Claims 151 and 156 are both independent claims that deal specifically with a remotely controlled lighting control device. The claims differ from other claims in the patent because a manual actuator is not a required component of these two claims. As a result, the claims do not include the phrase “as affected by the control information and the manual actuator.” In other words, these two independent claims do not specifically incorporate the concept of “true status” because true status involves a dual load system.

Control4 nevertheless argues that “true status” should be included in the construction because dependent claims 155 and 160 do incorporate a manual actuator. Control4 further argues that the control device in the independent claims has to be construed broadly to encompass manual actuators because the dual load function of the invention is the reason the claims were allowed.

“Under the doctrine of claim differentiation, each claim in a patent is presumptively different in scope.”³⁹ As such, “[t]he presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claims.”⁴⁰ This “presumption can be overcome if the circumstances suggest a different explanation, or if the evidence favoring a different claim construction is strong.”⁴¹

The patent prosecution history shows that true status was not at issue for claims 151 and 156.

³⁹ *Ecolab Inc. v. Paraclipse, Inc.*, 285 F.3d 1362, 1375 (Fed. Cir. 2002) (quotations and citation omitted).

⁴⁰ *Liebel-Flarsheim Co.*, 358 F.3d at 910 (citation omitted).

⁴¹ *Id.*

Instead, the discussion focused on the fact that the lighting control device can function without the benefit of a neutral line. In the reasons for allowance, claims 151 and 156 are not addressed. Thus, the prosecution history does not rebut the presumption that the manual actuator is not a component of the two independent claims. Consequently, true status should not be included in the construction.

Lutron's proposal discusses transmitting radio frequency signals through the air. Control4 correctly points out that radio frequency signals pass through more than just air. The Court therefore concludes the following construction better reflects the meaning of the term "Sending signals containing status information via wireless radio frequency transmissions."

II. '103 PATENT TERMS DISPUTED BY THE PARTIES.

The following are the terms in dispute for the '103 Patent, and the Court's construction of the terms.

A. Term 1: Adapted to be mounted at least partly within an electrical wall box (as used in claims 1 and 23).

The parties agree that the preamble is limiting and no further construction is required. The preamble addresses an electrical control device. Unless the preamble and body of the claim are read together, the structure is incomplete. The Court therefore concludes the preamble is limiting.

B. Term 3: A support yoke (as used in claims 1 and 23).

Lutron contends that Term 3 means "A structural frame." Control4 contends the term means "A support structure, separate from the housing, that is mechanically secured to the housing and is designed to be fastened to the wall box."

Claims 1 and 23 state the following regarding the support yoke: "a support yoke coupled to the housing, the support yoke having a fastening device for coupling the yoke to the electrical wall

box.” Control4's proposed construction seeks to include all aspects of the quoted phrase in its definition of “a support yoke.” The parties, however, did not ask the Court to construe the entire phrase. They only asked the Court to construe “a support yoke.” Lutron states it is “A structural frame,” while the initial phrase in Control4's construction states it is “A support structure.”

Although the proposed definitions are similar, Lutron uses words other than the words that are being defined. Because this helps to explain and define the term more fully, the Court adopts Lutron's construction.

C. Term 4: Electric wall box (as used in claims 1 and 23).

Lutron contends that Term 4 means “An ‘electrical wallbox’ is a small, often metal box that is designed to be placed in a wall to mount light switches or other electrical controls. It is open on the front side, with dimensions prescribed by the National Electrical Manufacturers Association (NEMA).”⁴² Control4 contends the term means “A box that is designed to contain one or more electrical components and is designed to be installed in a wall.”

Although a patent's specification cannot add a limitation to a claim, it can help define the meaning of a term.⁴³ Here, the background of the invention describes an electrical wallbox as that of standard size.⁴⁴ The summary of the invention discusses the confined space of a standard electrical wallbox.⁴⁵ Indeed, throughout the entire specification, the electrical wallbox is small,

⁴² “NEMA” refers to the National Electrical Manufacturers Association.

⁴³ *See Vitronics Corp.*, 90 F.3d at 1582.

⁴⁴ ‘103 Patent, col. 2:6–11.

⁴⁵ *See* ‘103 Patent, col. 4:26–30.

confined, and standard in size.⁴⁶

Control4 contends, however, that the term should not refer to size because the electrical box can vary depending on the electrical device that is being controlled. The specification indicates that “the antenna of the present invention can be applied to the communication of signals relating to the control and status of other devices, for example, communication equipment, motors, security systems, appliances, HVAC systems (heating, ventilating and air conditioning).”⁴⁷ Because such electrical devices may be larger than NEMA-standard wallboxes, Control4 argues the size of the electrical wallbox should not be limited.

While it is true that different electrical devices may require larger electrical boxes, this patent pertains only to the electrical wallbox for the control device. The fact that the antenna may send signals to control larger electrical devices does not require that the electrical wallbox for the control device vary in size. The object of the patent is to have a control device of compact size that fits within “the small space available in electrical wallboxes.”⁴⁸ Thus, the concept of “small” is inherent in the patent.

The wallbox also is described as having an opening.⁴⁹ The embodiment describes the opening as outwardly facing.⁵⁰ Claims 1 and 23 refer to a “faceplate for an outwardly facing

⁴⁶ ‘103 Patent, col. 4:26–30; 4:40–42; 12:10–14.

⁴⁷ ‘103 Patent, col. 1:40–46.

⁴⁸ ‘103 Patent, col. 4:41.

⁴⁹ ‘103 Patent, col. 2:19; 4:6–7.

⁵⁰ ‘103 Patent, col. 11:11–12.

opening of said wallbox.”⁵¹ The Court therefore concludes the term means, “A box of a size and design generally used by the electrical industry to contain electrical switches for residential and office application.”

D. Term 5: An antenna, sized to fit within an area defined by a faceplate for an outwardly facing opening of said wallbox (as used in claims 1 and 23).

Lutron contends that Term 5 means “An antenna that is small enough and designed to fit within an area defined by the outer edges of a faceplate designed for use with an electrical wallbox.”

Control4's original claim construction stated the term means “An antenna, able to fit entirely behind the faceplate for an outwardly facing opening of said wallbox.” During this lawsuit, Control4 redesigned its antenna. After doing so, it modified its claim construction to require that the antenna must be incapable of extending beyond the faceplate. Thus, Control4 contends now it means “An antenna designed so that it cannot extend outside the area defined by the outer edges of the faceplate.”

As the term itself states, the control device's antenna is “sized” to fit within an area defined by a faceplate for an outwardly facing opening of said wallbox. Control4 designed its antenna to fit behind the faceplate, but it is capable of being uncoiled to extend beyond the faceplate if needed for better reception.

Originally, Control4's antenna was not a “whip” antenna. Although Control4 contends its original antenna did not infringe Lutron's patent, Control4 states it redesigned its antenna after this lawsuit was commenced to move its antenna even further away from Lutron's patent. In redesigning

⁵¹ ‘103 Patent, col. 15:42–44; 17:15–17.

its antenna, Control4 looked to prior art and incorporated an antenna similar to the one used in the Heath Zenith patent.

The Heath Zenith patent is different from Lutron's because it provides only one-way communication, with no status feedback. Nevertheless, Lutron does refer to this prior art in the background section of its '103 patent. Specifically, Lutron discusses how an antenna that dangles outside the wall is aesthetically displeasing and may be hazardous if it dangles inside of the wall.⁵² Control4 argues that by criticizing this antenna configuration, Lutron relinquished the right to claim infringement on any antenna that is capable of dangling below the faceplate. Lutron claims it only criticized antennas that actually dangle, not those that are capable of dangling after modification. Additionally, it argues its reference "was useful to highlight the benefits of" its antenna invention, but Heath Zenith's patent did not need to be distinguished on the basis of an antenna configuration. Consequently, it did not limit the scope of its patent when it criticized Heath Zenith's configuration.

Notably, the Heath Zenith configuration also had a wire whip antenna that could be unwound to extend beyond the faceplate.⁵³ By referring to the Heath Zenith patent, Control4 contends that Lutron necessarily included the patent's entire antenna configuration, not just the extended configuration.

This disputed issue revolves around disclaimer and notice. Whatever Lutron disclaimed in its patent cannot be reclaimed now due to notice issues. The case law supports the proposition that when the specification of a patent criticizes a prior art, the art that is criticized is excluded from the

⁵² '103 Patent, col. 2:54–67.

⁵³ Decl. of Kevin W. Bates, Instructions for the Installation of a Heath Zenith Reflex Switch, at Ex. 7, at 12 (docket no. 123).

patent. “Specification” has been used broadly in other cases to include the “Background of the Invention” section.⁵⁴

Here, in the background section, Lutron criticizes the Heath Zenith patent because it allows an antenna to dangle below the faceplate. Consequently, antennas that dangle below the faceplate are not included within the scope of Lutron’s patent. Lutron, however, only criticized one aspect of Heath Zenith’s patent. It did not criticize its antenna configuration when coiled. Cases cited by Control4 to support its position do not appear to address the particular issue of whether a narrower, disclaimed configuration sweeps within it the broader configuration of a prior art.

In contrast, prosecution disclaimer cases show that disclaimers apply only when “the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during the patent’s prosecution to obtain claim allowance.”⁵⁵ In this case, the prosecution history is silent regarding whether Lutron’s disclaimer was necessary to obtain claim allowance. Because the Heath Zenith patent is distinguishable on other grounds, it is unlikely that claim allowance was solely dependent on the disclaimer. Moreover, even if it were a factor, Lutron did not clearly and unambiguously disclaim the entire Heath Zenith configuration. Indeed, nothing in the patent indicates the antenna must be incapable of being modified to extend beyond the faceplate. The Court therefore concludes the term means “An antenna developed so it fits within the outer edges of a faceplate that covers the opening of an electrical wallbox.”

⁵⁴ See *Astrazeneca AB v. Mut. Pharm. Co., Inc.*, 384 F.3d 1333, 1338 (Fed Cir. 2004).

⁵⁵ *Galderma Labs., L.P. v. Actavis Mid-Atlantic, L.L.C.*, Case No. 4:06-cv-471, 2008 U.S. Dist. LEXIS 66317, at *40 (N.D. Tex. Aug. 27, 2008) (quotations and citations omitted).

E. Term 7: Providing signals to said remote control device to indicate the status of said controlled electrical device (as used in claim 1).

Lutron contends that Term 7 means “The transmitter-receiver receives signals from the control circuit. The transmitter-receiver uses these signals to provide signals to the remote control device that can be used to indicate the status of the electrical device (which may include the on/off state, or the intensity level, or both of the electrical device).” Control4 contends it means “Providing signals to the remote control device that indicate the true status of the controlled electrical device (which may include, but is not limited to, the on/off state, the intensity level, or both, of the electrical device).”

Again, Control4 asks the Court to incorporate the phrase “true status” in the claim construction. “True status” is mentioned only in the ‘442 Patent. It is not mentioned in the ‘103 Patent, nor was it raised during the prosecution history of the ‘103 Patent. Consequently, it would be inappropriate to include this limitation.

Lutron’s proposed language goes beyond the stated term to capture language in the claim that is not part of the term being construed. Because the additional language is not necessary to the claim construction, it will not be included here. The Court concludes the term means “Delivering signals to a remote control device to report the condition of the electrical device that is being controlled (which condition may include, but is not limited to, the on/off state or the intensity level of the electrical device).”

F. Term 8: A manual actuator (as used in claim 5).

Lutron contends that Term 8 means “A mechanism, such as a button, knob or touch screen element, used to operate the device.” Control4 asserts that no construction is necessary. The ‘103

Patent and the '442 Patent are related patents. As such, the term is used consistently in the two patents. Therefore, consistent with the Court's construction of Term 4 in section I.B above, the Court concludes the term means "A mechanism, such as a button, knob, or touch screen sensor."

G. Term 9: Comprises a semiconductor device (as used in claim 8).

Lutron contends that Term 9 means "Includes, but is not necessarily limited to, a semiconductor device, such as a triac." Control4 contends it means "Includes at least one semiconductor device but does not exclude other additional devices." The parties stipulated that "comprising," as used in claims 1, 2, and 5 "means the claim requires at least the following elements, but does not exclude other, unlisted elements or components." Because "comprising" and "comprises" are substantially the same for this claim construction, Term 9 should be true to the definition of "comprising." Also, including an example of a semiconductor helps to explain what it is. Based on these factors, the Court concludes the term means "Includes a semiconductor device, such as a triac, but does not exclude other, unlisted elements or components."

H. Term 10: Housing (as used in claims 1 and 23).

Lutron contends that Term 10 means a "Structure that covers or protects components." Control4 contends it means "A structure, attached to the back of the support yoke, which houses components." Lutron opposes Control4's proposed construction because it requires the housing to be behind the support yoke. According to Lutron, this imposes a limitation that is not present in the patent.

The patent does not define what constitutes a "housing." Claims 1 and 23 state the control device must contain an antenna, transmitter-receiver, and a housing, among other things. The transceiver must be contained in the housing, but the patent does not require the antenna to be in

the housing. Control4 contends that the control device, and consequently, the housing are co-extensive with the wallbox.

The '103 Patent indicates the control device is located in the wallbox.⁵⁶ Yet, in other language, the patent states the control device is only “substantially within an electrical wall box.”⁵⁷ The patent further states that the antenna is located in the wallbox.⁵⁸ This fact is significant because Lutron’s antenna is located in front of the yoke, and consequently is not *literally* within the wallbox. Thus, references to a component being located in the wallbox do not necessarily require that the component be literally and completely within the wallbox.⁵⁹

Control4 further cites to a paragraph in the “Summary of the Invention” to support its contention. The paragraph states:

It is a further object of the present invention to provide an antenna as part of a lighting control device wherein the antenna is sufficiently small to fit within the area defined by the faceplate of the wallbox outside the opening of the wallbox with the *remainder of the control* device disposed in the wallbox. In this way, the antenna, although outside the wallbox, is concealed behind the faceplate.⁶⁰

⁵⁶ '103 Patent, col. 1:26–28.

⁵⁷ '103 Patent, col. 5:28–30.

⁵⁸ '103 Patent, col. 1:46–50; 6:1–2.

⁵⁹ In other briefing, Control4 cites to a number of statements made by Lutron’s expert Professor Swindlehurst to show the control device is located in the wallbox. The statements also refer, however, to the antenna being in the wallbox. *See* Memo. in Supp. of Defendant Control4 Corp.’s Mot. for Sum. J. of Non-Infringement of Asserted Claims of U.S. Patent No. 5, 982,103, at 11–12 (Aug. 15, 2008) (docket no. 89). Hence, the statements merely highlight that references to something being in the wallbox are imprecise.

⁶⁰ '103 Patent, col. 4:3–9 (emphasis added).

Because the paragraph states the antenna is outside the wallbox “with the remainder of the control device disposed in the wallbox,” Control4 argues this supports the requirement that the housing must be completely contained in the wallbox and necessarily be behind the yoke. The Court disagrees.

The paragraph’s focus is on the antenna, and the information about the “remainder of the control device” is imprecise. Although the paragraph states the antenna is outside the wallbox and the remainder of the control device is in the wallbox, Control4 agreed during the *Markman* hearing that the outer bezel and faceplate also would be outside of the wallbox. Since they are part of the control device, more parts of the device than the antenna obviously may be outside of the wallbox despite the language in the summary.

Control4 argues, however, this does not defeat its interpretation because “remainder” refers to the controlling elements of the control device, not such things as the outer bezel and faceplate.

This argument is not supported by the quoted language. Additionally, Claim 23 includes an actuator. The actuator is “coupled to said control circuit to provide a signal thereto to control the status of the controlled electrical device.”⁶¹ One could argue, therefore, that the actuator is a “controlling element.” Yet, it also must be outside of the wallbox due to its function. The Court therefore concludes the quoted language does not inform a person that the housing must be behind the yoke. The language is imprecise and does not literally mean all parts of the control device, except the antenna, must be in the wallbox.

The preambles to claims 1 and 23 state the control device is “adapted to be mounted at least partly within an electrical wall box.” Both parties have agreed that the preamble is limiting.

⁶¹ ‘103 Patent, col. 17:20–22.

Consequently, the claim itself shows that the control device is not co-extensive with the wallbox. Moreover, nothing in the relevant claims states the housing must be fully within the wallbox. This means the housing may be partly outside of the electrical wallbox. The Court therefore concludes the term means “A structure that protects or holds components.”

I. Term 11: Outer bezel disposed over said antenna (as used in claim 23).

Lutron contends that Term 11 means “A structure which frames or surrounds a manual actuator or display element, physically arranged to cover or surround the antenna.” Control4 contends the term means “A structure, attached to the front of the support yoke, disposed over the antenna.”

The bezel is the outer component of the remote control device, which means it must have spaces or holes so that the buttons or other controls on the manual actuator may be accessible. In this sense, the bezel frames or surrounds a manual actuator or display element. The claim itself states, however, that the outer bezel is “disposed over” the antenna. This implies that it covers or at least partly covers the antenna as opposed to merely surrounding it. “Partly covers” allows for the outer bezel to be disposed over the antenna, but also captures that the outer bezel has spaces or holes in it for access to the actuator.

Control4 asks the Court to specify that the outer bezel is attached to the front of the yoke. While the “outer” bezel is an exterior component, it is not required to *attach* to the yoke. Figure 3 provides an example where multiple components are between the outer bezel and the yoke.⁶²

⁶² ‘103 Patent, Fig. 3 (showing multiple components in between the bezel (330) and the yoke (318)).

Consequently, it is possible for the outer bezel not to touch the yoke. Based on these factors, the Court concludes the term means “An exterior structure that covers, at least in part, the antenna.”

SO ORDERED this 20th day of January, 2009.

BY THE COURT:

A handwritten signature in black ink, appearing to read "Clark Waddoups", written over a horizontal line.

Clark Waddoups
United States District Judge