United States District Court, N.D. Texas, Dallas Division.

GENLYTE THOMAS GROUP LLC, Plaintiff. v. LUTRON ELECTRONICS CO., INC, Defendant.

No. Civ.A. 302CV0602K

March 31, 2004.

Dean A. Pelletier, David Z. Petty, Donald J. Pochopien, George P. McAndrews, Gerald C. Willis, Heather Bjella, James R. Nuttall, John L. Abramic, Matthew Anderson, Ronald A. DiCerbo, Sara J. Bartos, McAndrews Held & Malloy, Chicago, IL, Michael T. Cooke, Friedman Suder & Cooke, Fort Worth, TX, for Plaintiff.

William D. Sims, Jr., Vinson & Elkins, Dallas, TX, Arthur H. Seidel, Cheryl Slipski, Gregory J. Lavorgna, Henry N. Blanco White, Drinker Biddle & Reath, Philadelphia, PA, Joseph R. DelMaster, Jr., Drinker Biddle & Reath, Washington, DC, for Defendant.

MEMORANDUM OPINION AND ORDER

KINKEADE, J.

Before the Court are the parties' cross-motions and briefs on the issue of claim construction of the patent-insuit, U.S. Patent Number 4,792,731 ("the '731 patent"). After conducting a *Markman* hearing and reviewing the parties' briefs and all related filings and evidence, including the patent-in-suit, the specification, the patent prosecution history to the extent it was submitted by the parties, and the parties' proposed claim constructions, this Court construes the disputed claims according to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995) (en banc), *aff'd*, 517 U.S. 360 (1996).

I. Background

On December 20, 1988, the '731 patent, entitled "Multi-Room Controlle[r] For Individual Light Controls," was duly and legally issued to Lightolier, Inc. ("Lightolier") as the assignee of the investors' entire right, title and interest in the '731 patent. As of December 28, 1990, Lightolier was merged into the Genlyte Group, Inc. ("Genlyte Group"), which in turn on August 30, 1998 duly and legally assigned to Genlyte Thomas Group L.L.C. ("Genlyte Thomas") its entire right, title and interest in the '731 patent. Accordingly, the '731 patent is currently owned by Genlyte Thomas.

The substance of the '731 patent is three independent inventions, designed, in general, for uniformly

controlling the lighting in a partitionable space, where the space comprises multiple rooms, each with individual light controls for controlling the lighting individually in each room. The three inventions are: (1) a multi-room controller for controlling a plurality of individual light controls (claim 1); (2) an individual light control for setting lighting in a room (claim 14); and (3) a lighting control system for controlling the lighting in multiple rooms of a partitionable space (claim 8).

The overview of the '731 patent states several goals of the invention. The invention is meant to provide a multi-room controller whose linking of individual controls can be changed on-site, without requiring the physical rewiring of the controller or light controls. It is also meant to provide a lighting control system that causes the linked individual light controls to change their settings to the setting of a selected light control upon activation of the control. Additionally, the invention is meant to provide a lighting control system that avoids the need to wire all the individual controls and dimmers to a common point.

II. Applicable Law

A. Principles of Claim Construction

Claim construction is a matter of law, and claims are construed by the court as they would be understood by persons of ordinary skill in the field of the invention. *See* Markman, 52 F.3d at 979. The court starts with the claim itself, read in light of the specification. *See* Vivid Technologies, Inc. v. American Science & Engineering, Inc., 200 F.3d 795, 804 (Fed.Cir.1999). Using these tools, the court construes only the claims that are in controversy, and only to the extent necessary to resolve the dispute. Id. at 803.

In addition to the claim language, the prosecution history is often helpful in understanding the intended meaning, as well as the scope, of technical terms in the claims. *See* Vivid Techs., 200 F.3d at 804. In particular, the prosecution history is relevant in determining whether the patentee intends the language of the patent to be understood in its ordinary meaning. Although a court should generally give such terms their ordinary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, so long as the special definition of the term is clearly stated in the patent specification or file history. *See* Vitrionics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996).

When the intrinsic evidence unambiguously describes the scope of a patented invention, reliance on extrinsic evidence is improper. *See* id. at 1583. While the Court may consult extrinsic evidence to educate itself about the invention and relevant technology, it may not rely upon extrinsic evidence to reach a claim construction that is clearly at odds with a construction mandated by the intrinsic evidence. *See* Key Pharms. v. Hercon Labs. Corp., 161 F.3d 709, 716 (Fed.Cir.1998).

B. "Means Plus Function" Language

Several of the primary disputes at issue in this case deal with the use of so-called "means plus function" language. Generally, a court may not read limitations from the specification and prosecution history into the claims, despite the fact that claims often receive their interpretive context from the specification and prosecution history. *See* Rambus Inc. v. Infineon Technologies Ag, 318 F.3d 1081, 1088 (Fed.Cir.2003). However, there is an exception to the rule that the Court does not import limitations from the specification. When a patentee avails himself of the statutorily authorized "means plus function" claim form, certain structural limitations from the specification are imported into the claim construction process. *See* 35 U.S.C. s. 112, para. 6. Specifically, the statute provides that an element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or

acts in support thereof, and the claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. *See id*.

The intent of s. 112, para. 6, is to permit use of means expressions without recitation of all the possible means that might be used in a claimed apparatus. *See* O.I. Corp. v. Tekmar Co., 115 F.3d 1576, 1583 (Fed.Cir.1997). However, the use of means plus function language carries a price. Specifically, the price that a patentee must pay for use of that convenience is the limitation of the claim to the means specified in the written description and equivalents thereof. *See id*. As the Court of Appeals for the Federal Circuit (the "Federal Circuit") has stated, the quid pro quo for the convenience of employing s. 112, para. 6 is the duty to link or associate structure in the specification to the recited function. *See* Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d 1193, 1208 (Fed.Cir.2002).

Use of the term "means" in a claim followed by a functional statement gives rise to a presumption that the patentee intended s. 112, para. 6 to govern the claim's construction. *See* Personalized Media Communications, LLC v. International Trade Com'n, 161 F.3d 696, 703 (Fed.Cir.1998). This presumption can be overcome in two ways: (1) a claim element that uses the word "means" but fails to recite function corresponding to the means does not invoke s. 112, para. 6; and (2) even if the claim element specifies a function, if it also recites sufficient structure or material for performing that function, s. 112, para. 6 does not apply. *See* Allen Engineering Corp. v. Bartell Industries, Inc., 299 F.3d 1336, 1347 (Fed.Cir.2002) (internal citations omitted). In order to recite "sufficient structure," a claim term, as the name for structure, has to have a reasonably well understood meaning in the art. *See id*.

III. The Claims of the '731 Patent

According to the parties' briefing in this case, the meaning of at least a portion of each of the claims of the '731 patent is in dispute. The '731 patent has three independent claims, so-called because they stand alone and do not incorporate any other claims within them. The independent claims are claim 1, claim 8, and claim 14. The meanings of claims 2-7 depend on claim 1, the meanings of claims 9 through 13 depend on claim 8, and the meaning of claim 15 depends on claim 14. The Court will discuss each claim in turn.

A. Claim 1: Independent Claim Number 1-The Multi-room Controller

Claim 1 reads as follows:

A multi-room controller for controlling a plurality of individual light controls, each light control adapted to control directly lighting within an associated room of a partitionable space and to respond to other light controls that can indirectly control the lighting, comprising:

assignment means operable for linking individual light controls in a group for control by each individual control within the group; and

controller means in communication with each individual control and responsive to operation of the assignment means for enabling each individual light control within the group of linked controls upon activation to control the lighting within the rooms associated with the group,

the lighting thereby responsive to each of the linked individual light controls.

The parties dispute the meanings of several key terms and phrases included in claim 1 of the '731 patent.

1. Individual Light Control

Genlyte argues that "individual light control" should be construed separately, with one construction for "individual" and a second construction for "light control." Lutron argues that this proposed construction "parses what is clearly a unified term for a specific device into two parts."

Genlyte argues that "individual" should be constructed to mean "functionally separate from one or more other light controls," and that "light control" should be construed to mean "apparatus comprising one or more raise/lower switches, where each of the raise/lower switches controls one or more dimmers." However, the words of the specification foil Genlyte's attempts to construct "individual" separately from "light control," as the specification uses the terms "individual light controls 10," "light controls 10," and "individual controls 10" interchangeably.

Based on this intrinsic evidence, the Court agrees with Lutron that "individual light control," should not be construed separately, but must be construed together. Additionally, there is no evidence that the applicants intended to use the term "individual" in any manner not consistent with its ordinary meaning. Therefore, no construction is needed of the term "individual."

Regarding the construction of the term "individual light control 10," Lutron argues that no construction is needed, as the term claims "a device for controlling the light intensity setting in a single room, no more, no less." Lutron points to the language of the specification which states that "[t]he light controls 10 each act separately to control the lighting in their respective rooms when the individual rooms are defined by the partitions." Genlyte, on the other hand, asks the Court to construe "individual light control 10" to mean " 'apparatus comprising one or more raise/lower switches, where each of the raise/lower switches controls one or more dimmers,' and where 'raise/lower switch' is actually 'a master raise/lower switch or an individual raise/lower switch." '

Genlyte relies on the specification in arguing to include the raise/lower switches in the definition of "light control." For example, at column 5, lines 17 through 19 of the specification (the form of which below will be col. 5, ll. 17-19), the specification states that "[a] light control 10 typically has several raise/lower switches that each control a dimmer for a light within the room." Additionally, at col. 4, ll. 34-35, the specification states that "[i]ndividual controls 10 often have a number of raise/lower switches to control different types of lighting." Lutron, however, argues that construing "light control" to mean "apparatus comprising one or more raise/lower switches, where each of the raise/lower switches controls one or more dimmers," would improperly import language into the claim.

While Lutron argues that the word "typically" shows only that the light controls sometimes include *a* raise/lower switch, necessarily meaning that at other times, no raise/lower switch is included, the specification states that a light control 10 typically has "*several* raise/lower switches" (emphasis added). Additionally, the language in the specification states that the light controls 10 "*often* have a *number* of raise/lower switches" (emphasis added). This language indicates that while the light controls normally have more than one raise/lower switch, they always have *at least* one raise/lower switch. Also, col. 5, ll. 15-17 of the specification state that the "Lytemode Systems line" of lights is an example of the individual light controls 10. The evidence shows that at the time of the patent application, Lytemode light controls had several raise/lower switches for determining light control. Therefore, this intrinsic evidence shows that the individual light controls 10 of the '731 patent each had one or more raise/lower switches for controlling

light intensity.

However, Genlyte's attempt to further define "light control" as "controlling one or more dimmers" is not supported by the intrinsic evidence. Genlyte relies on the specification's statement that "[a] light control 10 typically has several raise lower switches that each control *a* dimmer for light within the room" as the basis for its argument (emphasis added). Genlyte cites case law from the Federal Circuit which states that while the article "a" may in fact mean "one," "a" can mean "more than one" depending on the context in which the word is used. *See* Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 977 (Fed.Cir.1999). However, Genlyte has presented nothing in the intrinsic evidence which indicates that "a dimmer" should refer to "one or more dimmers." Without this evidence, the term "a" will carry its ordinary meaning, which does not refer to more than one dimmer. Genlyte also wishes to have "raise/lower switch" defined as "master raise/lower switch or an individual raise/lower switch." This definition is not supported by the intrinsic evidence, and likewise fails.

Therefore, the term "individual light control" is defined by the intrinsic evidence to mean "an apparatus comprising one or more raise/lower switches."

2. Each

Genlyte asks the Court to construe the term "each" as meaning "any or all." Lutron, however, argues that the proper interpretation of "each" is "every" when the word is used as an adjective, and "every one" when the word is used as a pronoun. The parties agree that "each" applies to every control in the mimic mode, and seem to agree that "each" is either irrelevant or does not apply to the master/slave mode. Indeed, Genlyte argues that in master/slave mode, 'each' is not manifest in (*i.e.*, is irrelevant to) the system or product," and Lutron argues that "there is no plausible interpretation of 'each' that is consistent with [the master/slave] mode." Therefore, the Court will only concern itself with the meaning of "each" in the mimic mode.

The parties' disagreement is one of semantics. Genlyte and Lutron agree that "each" only applies to the mimic mode of the invention. The parties also agree that "any" or "every one" of the individual light controls or "all" or "every" individual light control operates in the same manner while in the mimic mode. Only because Lutron's proposed construction offers more consistency, by stating which term is used according to how the word "each" is used, the Court adopts its construction. Nevertheless, the terms which both parties seek to use could be interchangeable. For example, Lutron offers that in claim I, where it says "A multi-room controller for controlling a plurality of individual light controls, *each* light control adapted to control directly," the claim should be construed to read "A multi-room controller for controlling a plurality of individual light controls, *all* light controls, *all* light controls adapted to control directly." Therefore, the Court adopts Lutron's construction of "each," which is " 'each' is 'every' when the word is used as an adjective, and 'each' is 'every one' when the word is used as an adjective, sproposed construction accomplishes the same purpose.

3. Directly

As stated above, the multi-room controller discussed in claim 1 controls "a plurality of individual light controls, each light control adapted to control *directly* lighting within an associated room of partitionable space ..." (emphasis added). Genlyte proposes that the Court construe "directly" to mean "independently of a central controller," where "central controller" means "a single hub from which all commands exclusively come." Lutron argues that no construction is necessary.

Genlyte and Lutron agree that "directly" refers to the ability of an individual light control to control the light intensity in the room where the individual control is located without the need of the multi-room controller. Both parties acknowledge the patent history of the '731 patent, which states that "applicants' apparatus has many individual controllers that each acts independently to *directly* control its own lighting until linked via the multi-room controller." See September 25, 1987 Amendment (emphasis in original).

Citing the dictionary definition of "directly," which reads "without divergence from the source," Lutron argues that "no construction of the term is needed, as the meaning of the word 'directly' in the claims is no different from the commonly understood meaning of the word." Genlyte argues that "[i]f 'directly' merely had its 'commonly understood meaning,' then the reason for adding the limitations 'directly' and 'indirectly' to the claims and the arguments that the applicants made to the U.S. PTO in connection with adding those limitations to the claims would be rendered meaningless."

Ultimately, both parties agree that "directly" means "independent of a central controller," an important distinction which distinguished the '731 patent from the prior art of U.S. Patent Number 4,489,385, also known as the "Miller" patent. This distinction is part of the intrinsic evidence, and shows the special meaning which the applicants intended to use through the word "directly." Therefore, "directly" is construed to mean "independently of a central controller."

4. Indirectly

Similarly, while Genlyte and Lutron agree that "indirectly" in claim 1 refers to the ability of one individual control to control the lighting assigned to another individual control, the parties disagree on the role of the multi-room controller in the process. Genlyte's proposed construction states that "indirectly" is defined as "independently of a central controller and between or among two or more light controls," while Lutron argues that the phrase "to respond to other light controls that can *indirectly* control the lighting" means "to receive signals routed from other individual light controls and control associated room lighting according to those signals" (emphasis added).

While the Court agrees with Genlyte insofar as the patent's prosecution history shows that the lighting can be indirectly controlled without the use of the central processing unit of the multi-room controller generating its own individual commands, the intrinsic evidence indicates that the multi-room controller is used to route the signals from one individual light control to another. Specifically, at col. 3, ll. 56-62, the specification reads: "[t]he multi-room controller 12 is adapted to link these individual controls 10 together when partitions have been removed and the individual rooms combined into a larger room. By so linking the controls 10, the lighting can be controlled uniformly by a selected control within the larger room without the need for individually adjusting each control."

Additionally, the patent history indicates that in claims 1 and 8, the multi-room controller 12 routes signals received from one individual light control 10 to other individual light controls 10. In the document entitled "Amendment After Final Rejection," dated May 16, 1988, the applicants discussed how the '731 patent differed from the prior art of a previous invention, the Miller patent. Specifically, the applicants stated that "[t]he amended claims 1 and 8 ... now clearly distinguish over what is shown and taught by Miller.... The multi-room controller 12 does not generate the lighting commands. In claim 8 particularly, the actual switch settings are communicated to the other light controls via the controller 12." While the history speaks specifically to the routing role of the micro-controller 12 in claim 8, it also shows that claims 1 and 8 are

related. Taken with the language in the specification that the multi-room controller 12 links the individual light controls 10 to each other for the purpose of uniformly controlling the light, it is clear that the multi-room controller 12 plays a role in the indirect control of lighting at issue in claim 1.

Therefore, while Genlyte correctly argues that the individual light controls can respond to other individual light controls that can indirectly control the lighting without a central controller generating the commands, the Court construes the phrase "to respond to other light controls that can indirectly control the lighting" to mean "to receive signals sent from other individual light controls 10 via the multi-room controller 12, and control associated room lighting according to those signals."

5. Assignment Means

One element of the multi-room controller discussed in claim 1 is "assignment means operable for linking individual light controls in a group for control by each individual control within the group." This element is written in means-plus-function format, and the parties agree it is a mean-plus-function limitation subject to s. 112, para. 6 of the patent statute.

In interpreting a means plus function claim, the Court first identifies the function recited in the claim, and then identifies the corresponding structure set forth in the written description that performs the particular function set forth in the claim. *See* Asyst Technologies, Inc. v. Empak, Inc., 268 F.3d 1364, 1369 (Fed.Cir.2001). Under s. 112, para. 6, the Court may not import functional limitations not recited in the claim, or structural limitations from the written description which are unnecessary to perform the claimed function. *See* Wenger Mfg., Inc. v. Coating Machinery Systems, Inc., 239 F.3d 1225, 1233 (Fed.Cir.2001).

In this case, the function recited by claim 14 is "linking individual light controls in a group for control by each individual control within the group." The corresponding structure for performing the specified function is named at col. 3, II. 66-68 and col. 4, II. 1-3 of the specification, comprising "graphic assignment panel 14 with an array of button switches. Alternatively, the assignment means may comprise a set of multiple setting switches such as thumbwheel switches 16 that communicate with the multi-room controller 12."

However, Lutron wishes to restrict the specified structures further, proposing this instruction: "the graphic assignment panel 14 with an array of button switches and communication capability for signaling the operation of each button along a twisted pair of wires, the panel with thumbwheel switches 16 and communication capability for signaling the setting of each switch in BCD along twisted pairs of wires, and equivalent structures having the function of linking individual light controls in a group for control by each individual control within the group." Genlyte disagrees with Lutron that the structure which comprises the "assignment means" includes an "array of button switches," "communication capability for signaling the operation of each button [or for signaling the setting of each switch]," or "twisted pairs of wire."

The language of the specification is clear enough. Despite Genlyte's objections, the structure does include "an array of button switches," and despite Lutron's efforts, the structure does not include the phrase "communication capability for signaling the operation ..." or "along a twisted pair of wires." *See* Asyst, 268 F.3d at 1370 (holding that communication lines which connected communication means to processing means was its own structure, apart from either the structure of either the microcomputer means or the communication means).

Therefore, in accordance with the specification, "assignment means" is construed to mean "a graphic

assignment panel 14 with an array of button switches, or, alternatively, a set of multiple setting switches such as thumbwheel switches 16 that communicate with the multi-room controller 12, and equivalents thereof."

6. Controller Means

Another element of the multi-room controller discussed in claim 1 is "controller means in communication with each individual control and responsive to operation of the assignment means for enabling each individual light control within the group of linked controls upon activation to control the lighting within the rooms associated with the group." This element is written in means-plus-function format, and the parties agree it is a mean-plus-function limitation subject to s. 112, para. 6 of the patent statute. The function performed by the controller means is to be "in communication with each individual control and responsive to operation of the assignment means for enabling each individual light control within the group of linked controls upon activation to control the lighting within the rooms associated with the group of linked controls upon activation."

Genlyte argues that the structure included in the specification for performing the function is "microcontroller 44 and instruction code 50, and equivalents thereof." Lutron contends that the structures recited in the specification for performing the function are "the multi-room controller 12, including at least the microcontroller 44, including the CPU 42 and the program code 50 in EPROM 48; the serial I/O ports 62, 72, and 74; the button assignment table and active button map in EEPROM 35 (except when thumbwheel switches 16 are present); and the FIFO output memories 53 in RAM 52, and equivalent structures...."

Lutron presumably gets the language for its proposed construction from the language of the specification at col. 7, ll. 17-28, which reads:

Communication within the controller 12 occurs over a bus 46 that links the microcontroller 44 to the EEPROM 35 as well as to the other circuit elements within the controller. The microcontroller 44 fetches its instructions from an EPROM 48 that stores the instruction code 50 for the controller's operation. Read/write memory is provided by a RAM 52 that is organized into ten 256 byte output FIFOs 53 (first in, first out). The data codes received from the ten light controls 10 are read by the microcontroller 44 and then stored in and transmitted from those FIFOs 53 by the microcontroller 44 in the order in which the codes arrive.

7:17-28. The specification also provides that "communication with the graphic assignment panel 14 (or the alternative thumbwheel switch panel 16) and the microcontroller 44 is through an output port 72 and an input port 74," and that the "microcontroller 44 communicates with the individual light controls 10 ... through serial I/O ports 62. Col. 8, ll. 1-4; col. 7, ll. 46-48.

However, while many of those structures comprise the controller means (see claim 6, below), the only structures "in communication with each individual control" and "responsive to operation of the assignment means for enabling each individual light control within the group of linked controls upon activation to control the lighting within the rooms associated with the group" are the microcontroller 44 and the instruction code 50. *See* Comark Communications, Inc. v. Harris Corp., 156 F.3d 1182, 1187 (Fed.Cir.1998) (holding that each claim in a patent is presumptively different in scope). If "controller means" in claim 1 were construed as specifically as the terms in claims 6, claim 6 would be superfluous. *See id*.

Accordingly, the structures named in the specification for performing the specified function of being "in communication with each individual control and responsive to operation of the assignment means for

enabling each individual light control within the group of linked controls upon activation to control the lighting within the rooms associated with the group" are "the microcontroller 44 and the program code 50 stored in EPROM 48, and equivalents thereof."

7. Communication

Genlyte asks the Court to construe the word "communication," which appears in claims 1 and 8, and the word "communicating," which appears in claims 8 and 14, to mean "digital communication" and "digitally communicating." While Genlyte argues that "the digital nature of 'communication' ... was apparent to the U.S. PTO, and was (and is) apparent to one of ordinary skill in the Relevant Art," Lutron contends that because the inventors never claimed the digital nature of the communication as a feature of the invention in either the independent or dependent claims, the Court should not now do the inventors' work for Genlyte.

The Federal Circuit has unequivocally stated that (1) this Court cannot alter what the inventors chose to claim as their invention, (2) limitations appearing in the specification will not be read into claims, and (3) interpreting what is *meant* by a word *in* a claim is not to be confused with adding an extraneous limitation appearing in the specification, which is improper. *See* Bayer AG. v. Biovail Corp., 279 F.3d 1340, 1348 (Fed.Cir.2002) (internal citations omitted) (emphasis added). The parties do not disagree as to the communication that takes place in the '731 patent. The only disagreement regards whether such communication is digital in nature.

The specification at col. 2, ll. 30-33, states that one objective of the invention is to "simplify the installation of such a multi-room controller by utilizing digital rather than analog signal transmission between individual light controls and the multi-room controller." Additionally, at col. 5, ll. 30-35, the specification states that the individual light controls are adapted to communicate with the multi-room controller through "a digital signal comprising data codes to the controller 12 and receive instructions and data therefrom." The specification goes on to state at col. 5, ll. 45-50 that "[b]ecause of the digital nature of communication, each light control 10 and the controller 12 are connected by twisted pairs 24 of telephone wire ... capable of transmitting the digital signal at up to 1200 baud without measurable signal degradation."

Therefore, the specification clearly shows that the communication which takes place is "digital." While the claim does not specifically say "digital communication," one of skill in the relevant art would have understood that the communication at issue in the '731 patent is digital in nature. Therefore, "communication" in claims 1 and 8 and "communicating" in claims 8 and 14 mean "digital communication" and "digitally communicating."

B. Claim 2

The language of claim 2 reads "the multi-room controller of claim 1 including mode means for determining the selected individual control, the mode means determining in one mode that the selected control is an individual control preselected for each group of linked controls and determining in another mode that the selected control is the individual control last activated within the group."

The parties agree that "mode means" is means plus function language, and that the function to be performed is "determining the selected individual control, ... determining in one mode that the selected control is an individual control preselected for each group of linked controls and determining in another mode that the selected control is the individual control last activated within the group." That is, the mode means for determining whether master/slave mode is operative or mimic mode is operative. Genlyte states that the structure recited in the specification to carry out the function is "function select DIP switches 54, and equivalents thereof," and Lutron asserts that the structure named to carry out the function is "the switch Dip (2), which is one of the function select switches 54, and the CPU 42 programmed to carry out steps 115-118 in Fig. 5 and steps 153-154 in Fig. 8, and their equivalents structures." The language of the specification itself, at col. 7, 11. 29-33, reads "[t]he means for determining the operation mode of the multi-room controller 12 comprises function select DIP switches 54 that communicate with the central processing unit 42 through a I/O port 56 on the microcontroller 44."

At col. 9,1. 14, the specification shows that the function select DIP switch which determines the system's mode of operation is DIP switch 2. However, the other details which Lutron seeks to import into the structure are unnecessary for determining the structure which performs the specified function, as they only relate to the diagnostic processes of the system. Therefore, the Court construes "mode means" in claim 2 to be "the switch DIP 2, which is one of the function select switches 54, that communicates with the central processing unit 42 through an I/O port 56 on the microcontroller 44, and its equivalents thereof."

C. Claim 3

Genlyte argues that the term "memory means" in claim 3 is not a means plus function limitation subject to the requirements of s. 112, para. 6. To support its argument, Genlyte offers the Declaration of Steven Carson. Mr. Carson's Declaration is extrinsic evidence, only to be considered if the Court finds the claim language to be ambiguous in light of the specification and prosecution history. Lutron, on the other hand, argues that "memory means" is a means plus function limitation, where the structure for performing the function described in claim 3 is detailed in the specification.

As stated above, use of the word "means" creates a presumption that the language is means plus function language. Unless the claim recites "definite structure" corresponding to the stated function of the claim, the language must be interpreted as means plus function language. *See* Cole v. Kimberly-Clark Corp., 102 F.3d 524, 531 (Fed.Cir.1996). In that case, which dealt with a patent regarding a diaper, the Federal Circuit held that use of the phrase "perforation means" in a claim did not constitute means plus function language, because the claim not only cited structure-perforations-but also the location of the perforations.

In this case, the only possible structure that could be recited in the claim is "memory," as the remainder of the claim discusses the function served by the memory means. However, the specification gives a detailed description of the structure used to carry out the function. Therefore, "memory means" is means plus function language, and the Court must determine the structure described in the specification for carrying out the function of storing information identifying a group of linked controls.

According to the specification, the structure designated for carrying out the function comprises "button assignment table 37 and active button map 36 [which] are used by the central processing unit 42 of a microcontroller 44 to construct a room connection table 38 within the microcontroller's internal memory." Specification at col. 7, II. 1 -4. The specification also provides that the button assignment table 37 and active button map 36 are included within the memory of an electrically erasable programmable read only memory (EEPROM) 35. Fig. 1.

Therefore, the structure designated to carry out the function of storing information identifying a group of linked controls is "the EEPROM 35, including button assignment table 37 and active button map 36, which

are used by the central processing unit 42 of a microcontroller 44 to construct a room connection table 38 within the microcontroller's internal memory, and its equivalents thereof."

D. Claim 4

Claim 4 reads: "the multi-room controller of claim 3, in which the memory means is nonvolatile and reprogrammable to change the identification of the linked controls within a group selected by a switch." Genlyte argues that "memory means" in claim 4 is "a device in which data can be input and stored for retrieval at a later time," and Lutron argues that the proper definition is "the button assignment table 37 and active button map 36 in EEPROM, and equivalents thereof."

Pursuant to the Court's discussion of the memory means of claim 3 above, the memory means of claim 4 is construed to mean "EEPROM 35, including button assignment table 37 and active button map 36, and equivalents thereof."

E. Claim 5

The language of claim 5 reads, in pertinent part, "[t]he multi-room controller of claim 1 in which the assignment means comprises a plurality of multiple setting switches...." Genlyte and Lutron agree that "multiple setting switches" restricts the "assignment means" in claim 5 to thumbwheel switches 16 and its equivalents. Therefore, "assignment means" in claim 5 is construed to mean "thumbwheel switches 16 and its equivalents thereof."

F. Claim 6

Claim 6 reads:

The multi-room controller of claim 1 in which the controller means comprises:

I/O means for two-way communication with the individual light controls and the assignment means;

memory means for storing information received through the I/O means indicating the groups of individual controls linked and their present settings; and

central processing means for transmitting the setting of the individual light control that controls a group to all the controls within the group.

The meanings of each of the three "means" phrases in claim 6 are in dispute.

1. I/O Means

Genlyte argues that the phrase "I/O means for two-way communication with the individual light controls and the assignment means" should be interpreted as meaning "digital communication" for communication, and "functionally separate from one or more other light controls" for individual. The Court has already rejected those definitions.

However, both parties agree that the "I/O means" is means plus function language, where the function to be performed is "two-way communication with the individual light controls and the assignment means," and

the corresponding structure set out in the specification are the I/O ports 62, 72, 74. Therefore, I/O means is construed to be "I/O ports 62, 72, 74 and equivalents thereof."

2. Memory Means

The second element of claim 6 reads "memory means for storing information received through the I/O means indicating the groups of individual controls linked and their present settings." Lutron contends that "memory means" is a means plus function phrase, with the specified function being "storing information received through the I/O means indicating the groups of individual controls linked and their present settings," and the structure recited in the specification being "the EEPROM 35, the microcontroller's internal memory, and the FIFOs 53, and their collective equivalents." Genlyte argues that "memory means" is "a device in which data can be input and stored for retrieval at a later time...."

The phrase "memory means" in claim 6 is written in means plus function language, and the claim does not recite structure definite enough to rebut the presumption that it is a means plus function situation. The function performed by the memory means is "storing information received through the I/O means indicating the groups of individual controls linked and their present settings," and the specification recites the structures which carry out the function. As addressed above, the specification states that "[t]he button assignment table 37 and active button map 36 [which] are used by the central processing unit 42 of a microcontroller 44 to construct a room connection table 38 within the microcontroller's internal memory." Additionally, the specification states that "[r]ead/write memory is provided by a RAM 52 that is organized into ten 256 byte output FIFOs 53 (first in, first out). The data codes received from the ten light controls 10 are read by the microcontroller 44 in the order in which the codes arrive." Specification at col. 7, ll. 22-28.

Lutron correctly argues, therefore, that the EEPROM 35, the internal memory of the microcontroller 44, and the FIFOs 53 each take part in performing the function of storing information received through the I/O means indicating the groups of individual controls linked and their present settings. Therefore, the phrase "memory means" in claim 6 is construed to mean "the EEPROM 35, the microcontroller's internal memory, and the FIFOs 53 of RAM 52, and equivalent structures."

3. Central Processing Means

The third element of claim 6 reads "central processing means for transmitting the setting of the individual light control that controls a group to all the controls within the group." "Central processing means" is written in means plus function format, and the function to be performed by the central processing means is "transmitting the setting of the individual light control that controls a group to all the controls within the group." Figure 7 in the specification depicts how the microcontroller 44 monitors individual light controls 10 and transfers data codes from one linked control 10 to another, and the process is described in the specification at col. 10, 11. 63-68, col. 11, 11. 1-14. The specification also provides that the multi-room controller 12 includes "a central processing unit that links the individual controls 10." Specification at col. 4, 11. 46-47.

Therefore, the structure recited for carrying out the specified function of transmitting the setting of the individual light control that controls a group to all the controls within the group is "the central processing unit 42 of microcontroller 44, when programmed to carry out the steps of Figure 7, and equivalents thereof."

G. Claim 7

The parties agree that the construction of "I/O means" in claim 7 is identical to the I/O means of claim 6.

H. Claim 8: Independent Claim Number 2-The Lighting Control System

Claim 8 is the second independent claim of the '731 patent, and claims 9-13 are dependent on its construction. The claim reads as follows:

A lighting control system for controlling the lighting in multiple rooms of a partitionable space, comprising:

a plurality of individual light controls each having switch means for controlling directly the lighting individually in an associated room of the space and having I/O means for communicating the switch settings to other individual light controls for indirect control of lighting in other rooms;

assignment means operable for linking individual light controls in a group for control by each individual control within the group; and

controller means in a communication with each individual control and responsive to operation of the assignment means for receiving the switch settings and communicating said switch settings to the other individual light controls within the group to enable each individual light control to control directly or indirectly via its switch means the lighting within the rooms associated with the groups,

the lighting thereby responsive to each of the switch means as it is activated.

Many of the disputed terms in claim 8 have been construed above, in claim 1 (see "The Court's Construction," below). Here, the Court will only discuss those terms which have yet to be construed by the Court.

1. Switch Means

The parties dispute the meaning of the phrase "switch means," which appears in claim 8 three times. The parties agree that "switch means" invokes the means plus function limitations of s. 112, para. 6, and that the function to be performed by the "switch means" is "controlling directly the lighting individually in an associated room of the space." However, they disagree on the structure recited in the specification which performs the stated function.

Incorporating in its proposed definition other proposed definitions at issue in this case, Genlyte contends that "switch means for controlling directly the lighting individually in an associated room of the space" in claim 8 means "switch means for controlling independently of a central controller the lighting within one zone or channel in an associated room of the space," where the corresponding structure for switch means is "one or more individual (*i.e.*, within one zone or channel) raise/lower switches, and equivalents thereof." Lutron contends that the same phrase means "the raise/lower switches described at column 5, lines 18-19 and column 4, lines 28-41, the buttons for presets described at column 5, lines 20-21, the switches mentioned at column 11, line 4, and equivalents thereof for controlling directly the lighting individually in an associated room of the space."

The specification of the '731 patent states that "[a] light control 10 typically has several raise/lower switches that each control a dimmer for a light within the room. The controller 10 may also include [a] number of

buttons for presets that each automatically adjust the switches to a predetermined setting." As can be seen by their respective definitions of "switch means," the parties disagree on the importance of the "buttons for presets" described at col. 5, ll. 19-21. While Genlyte says that " 'switch means' is not a reference to and is distinct from a 'button for presets," ' Lutron says that "the difference between the terms 'button' and 'switch' is not significant."

Lutron argues that the "buttons for presets" and "raise/lower switches" each perform the stated function of controlling directly the lighting individually in an associated room of the space. Lutron bases its argument on the fact that according to the terms of the specification, the buttons mentioned in the specification adjust the switches, thereby carrying out the same function as the switches. Conversely, Genlyte simply asserts that "the Specification carefully distinguishes between the term 'switches,' on the one hand, and the term 'buttons,' on the other hand....'Switch means' is not a reference to and is distinct from a 'button for presets." 'The main dispute in construing the phrase "switch means" in claim 8, then, is whether the "buttons for presets" perform the function of controlling directly the lighting individually in an associated room of the space.

The Court agrees with Lutron that "switch means" encompasses any structure which performs the specified function. Although Genlyte attempts to argue that the "buttons for presets" do not perform the function of "controlling directly the lighting individually in an associated room of the space," the specification explicitly provides that the buttons for presets "automatically adjust the switches to a predetermined setting." In practice, when an individual punches a "button for presets" as described in the specification, the switches of the individual light control 10 would automatically be adjusted to a predetermined setting, thus controlling the lighting as would using a raise/lower switch itself. Practically speaking, then, the "buttons for presets" perform the same specified function, "controlling directly the lighting individually in an associated room of the space," as the raise/lower switches.

While the Court agrees with Lutron that the "buttons for presets" are "switch means" in claim 8, the other references to raise/lower switches in the specification need not be included in the construction of the phrase. The references to raise/lower switches at 4:28-41 and 11:4 merely refer to the raise/lower switches referenced at 5:18-19, and to include the additional references would be superfluous. Accordingly, the "switch means" of claim 8 are "the raise/lower switches described at column 5, lines 18-19, the buttons for presets described at column 5, lines 20-21, and equivalents thereof."

2. I/O Means

The parties agree that "I/O means" in claim 8 is a means plus function claim, where the stated function is "communicating the switch settings to other individual light controls for indirect control of lighting in other rooms." Similarly, the parties agree that the serial I/O port 23 described at 5:30-35 is the structure which performs the specified function. Therefore, the "I/O means" for performing the specified function is "serial I/O port 23, and equivalents thereof."

I. Claim 9

The language of claim 9 reads: "[t]he lighting control system of claim 8 in which the controller means includes mode means for determining that the selected control is an individual control preselected for each group of linked controls." The parties agree that "mode means" is a means plus function limitation, where the stated function to be performed is "determining that the selected control is an individual control preselected for each group of linked controls." This is the "master/slave" mode. The parties also agree that

the structure which carries out the function is the same structure that comprises the "mode means" in claim 2.

Therefore, the structure which comprises the "mode means" in claim 9, designated to carry out the specified function, is "the switch DIP 2, which is one of the function select switches 54, that communicates with the central processing unit 42 through an I/O port 56 on the microcontroller 44, and equivalents thereof."

J. Claim 10

The language of claim 10 reads: "[t]he lighting control system of claim 9 in which the controller means includes mode means for determining that the selected control is the individual control last activated within the group of linked controls." Like claim 9, the parties agree that the phrase "mode means" is a means plus function limitation. However, the mode at issue here is the "mimic mode," and the function to be performed is slightly different: "determining that the selected control is the individual control last activated within the group of linked controls." Nevertheless, the same structure applies to claim 10 as applies to claims 2 and 9.

Therefore, structure which comprises the "mode means" in claim 10, designated to carry out the specified function, is "the switch DIP 2, which is one of the function select switches 54, that communicates with the central processing unit 42 through an I/O port 56 on the microcontroller 44, and equivalents thereof."

K. Claim 11

The language of claim 11 reads "[t]he lighting control system of claim 8 in which the controller means includes memory means for storing information identifying the linked controls, the individual light controls linked by the assignment means." Discrepancies exist between the parties' proposed constructions of two phrases in claim 11.

1. The Individual Light Controls Linked by the Assignment Means

Genlyte asks the Court to interpret the phrase "individual light controls linked by the assignment means" in accordance with its proposed definitions of "individual," "light controls," and "assignment means" discussed above. Predictably, then, Genlyte argues that the proper construction of the phrase is "the light controls, which are functionally separate from one or more other light controls, linked by the assignment means, where the corresponding structure for the "assignment means" is graphic assignment panel 14 or, alternatively, a set of multiple setting switches (e.g., thumbwheel switches 16), and equivalents thereof." Lutron proposes no construction of the phrase.

For the reasons stated in the Court's discussion of the terms in claim 1 above, "individual light control" is construed to mean "an apparatus comprising one or more raise/lower switches," and "assignment means" is construed to mean "a graphic assignment panel 14 with an array of button switches, or, alternatively, a set of multiple setting switches such as thumbwheel switches 16 that communicate with the multi-room controller 12, and equivalents thereof." Accordingly, no additional construction of the phrase is needed beyond what the Court has already set out.

2. Memory Means

As was the case in claim 3, the parties disagree as to the scope and meaning of the phrase "memory means" in claim 11. Genlyte again argues that "memory means" is not a means plus function limitation, while

Lutron argues that it is such a limitation, with the structure comprising "memory means" in claim 3 also comprising the structure for "memory means" in claim 11.

For the same reasons as stated above, the Court holds that "memory means" in claim 11 is a means plus function claim. The stated function of the "memory means" in claim 11 is virtually identical to the function of the "memory means" in claim 3: "storing information identifying the linked controls...." Additionally, the specification states that the structure which comprises the "memory means" in claim 3 also comprises the "memory means" for "storing information identifying the linked controls, the individual light controls linked by the assignment means" in claim 11. Therefore, "memory means" is construed to be "the EEPROM 35, including button assignment table 37 and active button map 36, which are used by the central processing unit 42 of a microcontroller 44 to construct a room connection table 38 within the microcontroller's internal memory, and equivalents thereof."

L. Claim 12

The language of claim 12 reads "[t]he lighting control system of claim 11 including means for reprogramming the memory means on-site." The parties agree that the word "means" is a means plus function limitation, where the function to be performed is "reprogramming the memory means on-site," and the corresponding structure named in the specification for performing the function is "portable setup terminal 18." Therefore, "means" in claim 12 is construed to be "portable setup terminal 18 and its equivalents thereof."

M. Claim 13

The language of claim 13 reads "[t]he lighting control system of claim 8 including optocoupling means for optically coupling the controller means to the assignment means and to each of the individual light controls." The parties agree that "optocoupling means" is a means plus function limitation, where the function to be performed is "optically coupling the controller means to the assignment means and to each of the individual light controls," and the corresponding structure are the line receivers 66, referred to at col. 7, 1. 57. Therefore, "optocoupling means" in claim 13 is construed to be "line receivers 66 and equivalents thereof."

N. Claim 14: Independent Claim Number 3-The Individual Light Control

Claim 14 is the third and final independent claim of the '731 patent. Whereas the independent claims 1 and 8 discussed a multi-room controller and a lighting control system, respectively, claim 14 reads as follows:

An individual light control for setting the lighting in a room, comprising:

central processing means for controlling directly the light intensity of the associated lights in the room; and

I/O means for communicating light intensity information between the central processing means and other central processing means of other individual light controls to enable the individual light control to mimic the setting of the other individual controls.

Several of the phrases in claim 14 which the parties ask the Court to define, such as "individual light control," "directly," and "I/O means" are discussed above, in claims 1 and 8. Therefore, the Court will only discuss those terms which have yet to be construed.

1. Central Processing Means

The meaning and validity of the phrase "central processing means" in claim 14 is a matter of debate between the parties. Lutron contends that "central processing means" is a means plus function limitation, but argues that the specification does not name the structure required to perform the specified functions, thus rendering claim 14 invalid. Genlyte argues that the phrase is not a means plus function limitation, and that even if it is, the specification clearly links structure to perform the stated function.

As stated above, if an element of a claim uses the word "means," a presumption arises that the language is a means plus function limitation. A party may rebut the presumption by showing that the claim either mentions no function to be performed by the means or recites sufficiently definite structure for performing the desired function. *See* Rodime PLC v. Seagate Technology, Inc., 174 F.3d 1294, 1302 (Fed.Cir.1999). The language of the "central processing means" element of claim 14 states that the function to be performed by the "central processing means" is "controlling directly the light intensity of the associated lights in the room." Therefore, the question this Court must answer is whether "central processing means" recites sufficiently definite structure to avoid invoking a means plus function limitation.

As an initial matter, it is noted that simply because the phrase "central processing means" was found to be a means plus function limitation in claim 6, the Court is not bound to reach the same conclusion here. As the Federal Circuit stated in *Cole*, the Court must determine on an element by element basis whether s. 112, para. 6 applies. *See* Cole, 102 F.3d at 531. Therefore, merely because "central processing means" is a means plus function element in claim 6, that does not necessarily mean that the same is true in claim 14.

As stated above, when construing the meaning of a disputed claim, the Court must analyze the intrinsic evidence, which includes the claims, the specification, and the prosecution history. Whether a claim recites definite structure may be evidenced by a lack of alternate structure disclosed in the specification. *See* British Telecomms. PLC v. Prodigy Communications Corp., 189 F.Supp.2d 101, 109 (S.D.N.Y.2002) (citing Turbocare Division of Demag Delaval Turbomachinery Corp. v. General Electric Co., 264 F.3d 1111, 1120-21 (Fed.Cir.2001)).

In this case, the specification recites no alternate structure for performing the stated function of controlling directly the light intensity of the associated lights in the room, and Lutron contends that because the phrase is presented as "central processing," and not "central processor," the phrase describes function, not structure. However, the intrinsic evidence does indicate that "central processing means" recites sufficiently definite structure.

If one skilled in the relevant art would understand "central processing means" to be a central processing unit, then sufficiently definite structure exists to avoid implication of s. 112, para. 6. The U.S. PTO rejected the application of the '731 patent several times for indefiniteness. However, despite studying claim 14 in detail, the U.S. PTO never rejected the patent for indefiniteness in using "central processing means" in the language of claim 14. While this does not end all questioning of the structure of "central processing means," the prosecution history is relevant as intrinsic evidence that "central processing means" is not indefinite.

Additionally, at col. 3, II. 11, the specification referred to the central processing unit 42 of the microcontroller 44 contained in the multi-room controller 12 as "central processing means." While the specification does not refer to the individual light control 10 which is the subject of claim 14, the phrase

"central processing means" appears to be synonymous with central processing unit 42.

Perhaps even more telling is the fact that in its First Amended Answer and Counterclaims, Lutron acknowledges that the individual light control of claim 14 contained "central processors" for directly controlling the light intensity of associated lights in a room. In making its counterclaims against Genlyte, Lutron describes prior art which Lutron claims Genlyte failed to disclose to the U.S. PTO, and alleges that the Lightolier "Lytemode" System and the Lightolier "Scenist" System contained several features in common with the claimed elements of the '731 patent, including "central processors in the individual light controls for directly controlling the light intensity of associated lights in the room." Therefore, even Lutron acknowledges that "central processing means" recites sufficiently definite structure for performing the function of directly controlling the light intensity of associated lights in the room.

Accordingly, the "central processing means" element of claim 14 does not invoke s. 112, para. 6, as one skilled in the relevant art would understand "central processing means" to be "a central processing unit." Thus, "central processing means" is construed to be "a central processing unit."

2. I/O Means

The parties agree that "I/O means" in claim 14 is a means plus function claim, where the stated function is "communicating light intensity information between the central processing means and other central processing means of other individual light controls to enable the individual light control to mimic the setting of the other individual controls." The parties agree that the serial I/O port 23 is the structure which performs the specified function. Therefore, the "I/O means" for performing the specified function is "serial I/O port 23, and equivalents thereof."

3. To Mimic the Setting of the Other Individual Light Controls

The parties dispute the meaning of the term "mimic" in claim 14. Genlyte argues that "mimic" means "to imitate closely the adjusting (*i.e.* raising or lowering) of the other controls, which are functionally separate from one or more other light controls." Lutron asks the Court to interpret "mimic" to mean "to send its setting to other individual light controls and to receive and respond to settings from other individual light controls ."

At col. 4, ll. 26-33, the specification states that "[i]n a mimic mode, each of the controls 10 will mimic any other control activated within the group. For example, if a first individual control 10 in the linked group is activated to raise light intensity, all controls 10 will respond by raising the intensity of the respective lights in their rooms. If a second control in a group lowers light intensity, all individual controls correspondingly lower the intensity of their respective lights."

However, Lutron attempts to add into the meaning of mimic "to send its setting to other individual light controls," while the claim and the specification both speak only to the ability of the individual light control to respond to settings sent from other individual light controls. Therefore, the individual controls 10 "mimic" the light settings of other individual controls 10 by receiving and responding to the settings of the other individual controls 10.

Accordingly, "mimic" is construed to mean "receive and respond to."

O. Claim 15

Claim 15 reads: "[t]he individual light control of claim 14 in which the I/O means is adapted to communicate serially with other individual light controls over a twisted pair of wires."

The parties agree that "I/O means" in claim 15 is a means plus function claim, where the stated function is "communicat[ing] serially with other individual light controls over a twisted pair of wires." The parties agree that the serial I/O port 23 is the structure which performs the specified function. Therefore, the "I/O means" for performing the specified function is "serial I/O port 23, and equivalents thereof."

IV. The Court's Construction

Based on the Court's determinations above, the claims of the '731 patent are construed as follows:

• •			
an apparatus comprising one			
or more			
raise/lower switches			
when present as an adjective, "each" is			
"every" and when present as			
a pronoun,			
"each" is "every one"			
independently of a central controller			
to receive signals sent from other			
individual light controls 10 via the			
multi-room controller 12, and control			
associated room lighting according to			
those signals			
a graphic assignment panel 14 with an			
array of button switches, or,			
alternatively, a set of multiple setting			
switches such as thumbwheel switches			
16 that communicate with the multi-room			
controller 12, and equivalents			
thereof			
microcontroller 44 and the			

means	s program					
	code 50 stored in EPROM					
	48, and					
	equivalents thereof					
communica	tion digital communication					
Claim 2	Markman Interpretation					
mode	the switch DIP 2, which is					
means	one of the					
	function select switches 54,					
	that					
	communicates with the					
	central					
	processing unit 42 through					
	an I/O port					
	56 on the microcontroller					
	44, and					
equivalents thereof						
Claim 3	Markman Interpretation					
memory	the EEPROM 35, including					
means	button					
	assignment table 37 and					
	active button					
	map 36, which are used by					
	the central					
	processing unit 42 of a					
	microcontroller					
	44 to construct a room					
	connection table					
	38 within the					
	microcontroller's internal					
	memory, and equivalents					
	thereof					
Claim 4	Markman Interpretation					
memory	EEPROM 35, including					
means	button					
	assignment table 37 and					
	active button					
	map 36, and equivalents					
	thereof					
Claim 5	Markman					
	Interpretation					
assignment	thumbwheel switches					
means	16 and its					
01 : (equivalents thereof					
Claim 6	Markman Interpretation					

I/O means	I/O ports 62, 72, 74 and			
	equivalent			
	structures			
memory means	s the EEPROM 35, the			
	microcontroller's			
	internal memory, and the			
	FIFOs 53 of			
	RAM 52, and equivalent			
	structures			
central process	ing the central processing unit			
means	42 of			
	microcontroller 44, when			
	programmed			
	to carry out the steps of			
	Figure 7, and			
1	equivalent structures			
Claim Markm	an			
7 Interpr	etation			
I/O see clai	m 6,			
means above				
Claim 8	Markman Interpretation			
each	see claim 1, above			
directly	see claim 1, above			
indirectly	see claim 1, above			
Assignment	see claim 1, above			
means	1 • 1 1			
Controller	see claim 1, above			
means	(1 ' /1 '/ 1			
switch means	the raise/lower switches			
	described at			
	buttons for			
	presents described at a larger 5			
	presers described at column 5, lines 20, 21			
	and equivalents thereof			
I/O macna	and equivalents thereof			
	equivalents			
	thereof			
communication	digital communication			
communicating	digitally communicating			
Claim 9 Mark	man			
Intern	pretation			
mode see cl	aim 2.			
means above				
Claim 10 Ma	urkman			

	Interpret	ation			
mode	see clain	n 2,	_		
means	above				
Claim 11			Markman		
			Interpretation	ı	
the individ	dual light		see claim 1,		
controls li	nked by		above		
the assign	ment mean	s			
memory n	neans		see claim 3,		
			above		
Claim 12			Markman In	terpr	etation
means for	reprogram	ming	portable setu	ıp ter	minal
the memo	ry		18 and its		
means on-	site		equivalents t	hereo	of
Claim 13	Markn	nan Inter	rpretation		
optocoupl	ing line re	ceivers 6	66 and		
means	equiva	lents the	ereof		
Claim 14		Markma	an Interpretatio	on	
individual	light	see clair	m 1, above		
control					
directly		see clai	m 1, above		
Central pr	ocessing	a centra	l processing u	nit	
means					
I/O means		serial I/	O port 23, and		
		equival	ents		
		thereof			
mimic		receive	and respond to)	
communicating		digitally	communicati	ng	
Claim 15	Markman				
	Interpretat	tion			
I/O	see claim	14,			
means	above				

SO ORDERED.

N.D.Tex.,2004. Genlyte Thomas Group LLC v. Lutron Electronics Co., Inc.

Produced by Sans Paper, LLC.