United States District Court,
D. Massachusetts.

L P PROPERTY,
v.
JTM, LLC.

Civil Action No. 07-10207-RGS

Sept. 29, 2008.

Background: Patent owner filed action against competitor alleging infringement of patents involving control units of articulated adjustable beds. Court set forth to construe disputed terms.

Holdings: The District Court, Stearns, J., held that:
(1) term, "encrypt," meant to convert plain text into unintelligible form by means of cipher system;
(2) applicant surrendered identifier/address "key" embodiment to overcome patent examiner's prior art rejection;
(3) function of control means was to receive initiating signal, decode it, and then assign appropriate response to motors;
(4) corresponding structures of control means consisted of control unit, decoder, key switches, controller, and motor lifting interface;
(5) structure associated with receiver means was signal receiver, antenna, and receiver;
(6) phrase, "body supporting surface," meant mattress with at least two moveable parts;
(7) phrase, "vibration means," meant that motors had to be located only so as to be able to vibrate the bed; and
(8) phrase, "disposed within the frame means," meant that components had to be in area defined by frame.

Ordered accordingly.

5,235,258, 6,106,576, 6,684,423. Construed.

John T. Graff, Mirick O'Connell LLP, John O. Mirick, Mirick, O'Connell, DeMallie & Lougee, Worcester, MA, Elizabeth N. McKenna, Norma McKenna and Associates, Plymouth, MI, Theodore R. Remaklus, Wood, Herron & Evans, LLP, Cincinnati, OH, for L & P Property, et al.

Robert M. Abrahamsen, Michael A. Albert, James J. Foster, John L. Strand, Wolf, Greenfield & Sacks, PC, Boston, MA, Daniel J. Bernard, Vercruysse Murray, Bingham Farms, MI, Anthony W. Hong, Wolf, Greenfield & Sacks, P.C., Houston, TX, for JTM, LLC, et al.

MEMORANDUM AND ORDER ON CLAIM CONSTRUCTION

STEARNS**, District Judge.**

Plaintiffs L & P Property Management Company and Leggett and Platt Incorporated (collectively, L & P), brought this lawsuit against defendants JTM, LLC, and Scion, LLC, alleging that defendants' importation of adjustable beds from China violates three of L & P's patents. At issue are U.S. Patents No. 5,235,258, "Remotely Controlled Articulated Bed" (the '258 patent);No. 6,684,423, "Massage Motor Mounting for Bed/Chair" (the ' 423 patent); and No. 6,106,576, "Adjustable Massage Bed Assembly With Handheld Control Unit Having Automatic Stop Safety Feature" (the '576 patent). Before the court are the parties' arguments on claim construction.

BACKGROUND

The patents-in-suit involve the control units of articulated adjustable beds. The '258 patent teaches a handheld remote control device that operates an adjustable bed without interfering with the control units of adjacent beds (typically in semi-private hospital rooms or nursing homes). The '423 patent describes an adjustable bed designed as "an alternative piece of leisure furniture" for those who spend time "lounging in bed." The leisure design is quieter in operation than a hospital bed and offers more massage features. Finally, the '576 patent teaches an adjustable bed that includes a remote control with one or more buttons for moving the bed to preset positions ("chair," "lounge," and "back relief"), while incorporating a switch that halts the head and foot motors whenever the bed is vibrating.

CLAIM CONSTRUCTION

[1] [2] [3] [4] [5] "It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed.Cir.2005) (internal quotation marks and citation omitted). Claim construction, while not totally devoid of factual considerations, is primarily a question of law for the determination of the court. *See* Markman v. Westview Instruments, Inc., 517 U.S. 370, 388-389, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). In construing a claim, a court ideally limits itself to the construction of only those terms "that are in controversy, and only to the extent necessary to resolve the controversy." Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc., 200 F.3d 795, 803 (Fed.Cir.1999). Claim construction "ascribes claim terms the meaning they would be given by persons of ordinary skill in the relevant art at the time of the invention." SanDisk Corp. v. Memorex Prods., Inc., 415 F.3d 1278, 1283 (Fed.Cir.2005). The court "indulge [s] a heavy presumption that claim terms carry their full and ordinary customary meaning unless the patentee unequivocally imparted a novel meaning to those terms or expressly relinquished claim scope during prosecution." Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1323 (Fed.Cir.2003) (internal citations omitted).

[6] [7] [8] A disputed term should be construed by first examining the intrinsic evidence of record, that is, the words of the claims themselves, the specification, and the prosecution history. *See* Phillips, 415 F.3d at 1314. The patent specification " 'is always relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term.' " Id. at 1315, quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). As the purpose of the specification is to enable one skilled in the art to recreate the invention, *see* Phillips, 415 F.3d at 1323, it is "entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims." Id. at 1317. In addition, a court may look to the prosecution history. *See* id., citing Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed.Cir.1995). While it

may not be as authoritative as the specification, the prosecution history "can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Phillips, 415 F.3d at 1317. "The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention [in the specification] will be, in the end, the correct construction." Id. at 1316.

DISPUTED TERMS

1. ***The*** '258 Patent

The invention specifies an articulated bed with a body-supporting surface (mattress), at least one motor for moving segments of the mattress, and a control unit governing the motor. The bed is adjustable at the head, leg, and foot positions, and may also be vibrated. The bed includes a wireless receiver that accepts "keyed motor control signals" broadcast by a wireless transmitter located in the control unit. '258 patent, Col. 2, ll. 21-28.

A. "*Encrypted ... Control Signals*"

[9] The terms "encrypted motor control signals" and "encrypted vibration control signals" are repeated in Claims 1 and 31 of the '258 patent. "Encrypted" is the term most aggressively disputed by the parties. Claim 1 reads in significant part:

[a] wireless receiver means operably coupled to the control means, for receiving encryted [sic] motor control signals and for providing the encrypted motor control signals to the control means. FN1

FN1. Claim 31 reads: "E) control means operably coupled to the first and second motor and the first vibration means, for controlling the first and second motor and the first vibration means, thereby controlling positioning of the first, second, and third portions with respect to one another, and the impartation of vibration to the body supporting surface, in response to reception of first encrypted motor control signals, second encrypted motor control signals, and first encrypted vibration control signals; F) wireless receiver means operably coupled to the control means, for receiving encrypted motor control signals and encrypted vibration control signals, and for providing the first encrypted motor control signals, and the first encrypted vibration control signals to the control means." '258 patent, Col. 10, ll. 32-48.

'258 patent, Col. 8, ll. 1-4. The specification of the '258 patent provides two examples of how control signals can be transmitted and received in a secure fashion that insures that only one bed responds. In the first example, an "encryption key" is used to scramble the transmitted signals with an algorithm decodable by the receiving unit. The second example uses a "key"-an identifying number embedded in the remote signal that matches a "lock"-a unique "address" recognized by the receiver. The Summary of the Invention explains that

[i]n one embodiment, the wireless transmitter processes the motor control signals as a function of a key, and the wireless receiver processes the received keyed motor control signals as a function of the same key to thereby recover the original motor control signals. So configured, the keyed motor control signals will not be used by another bed that does not use the same key.

In one embodiment, the key can be used as an encryption key to reorganize the control signals pursuant to an appropriate algorithm. In another embodiment, the key can be an ID number or the like that is transmitted with the control signals as an identifier; beds that are not programmed to respond to that particular identifier will ignore the control signals bundled therewith.

'258 patent, Col. 2, ll. 30-44. The two potential embodiments are more clearly explained in the Description of the Preferred Embodiment.

The keyboard 201 accepts these control instructions and provides representative control signals to the encoder 202. The encoder 202 prepares these signals for transmission, and in particular, processes the signals as a function of a key 203. For example, the processing can include encrypting the control signals as a function of the key in conjunction with an encryption algorithm. Or, by way of another example, the key 203 can simply comprise an identifier that is bundled with the control signal prior to transmission.

Id., Col. 4, ll. 25-34.

[10] Defendants vigorously argue that L & P disclaimed the second embodiment-the use of an address/identifier-during the prosecution of the ' 258 patent before the United States Patent and Trademark Office (PTO). In the specification, L & P initially laid claim to the generic term "keyed" in describing the operation of the controllers and receivers. The PTO Examiner rejected the "keyed" claim as being obvious in light of prior art, citing Ruttiger U.S. Patent No. 4,992,784 (the '784 patent). The Examiner explained:

Ruttiger Fig. 1 teaches a remote control transmitter for controlling the adjustment of the bed surface, see Fig. 1 the six keys 2 for controlling the bed at the head portion, the body portion and the leg portion. Ruttiger further teaches that the communication between the transmitter and the receiver is thru 'cableless' infrared.

'258 Prosecution File, at 50.

On February 14, 1992, in response to the Examiner's rejection, L & P sought to distinguish Ruttiger without conceding the broad definition of the term "keyed." L & P argued that the Ruttiger patent taught a remote control unit that could be used with more than one bed, while its invention sought to insure that multiple beds would not be affected. In L & P's explanation of Ruttiger, two beds, A and B, are controlled by the same remote control. To switch from bed A to bed B, the user presses the button for bed B on the keyboard, while simultaneously pressing the key for the desired function. When the bed B button is released, the control unit reverts to bed A. In contrast,

[the L & P invention] is not concerned with being able to control more than a single remote controlled device. In fact, the applicant is more concerned with ensuring that only a single remote controlled device will respond to a particular transmitter. *To support this intent, the applicant provides for "keyed" control signals; i.e., signals that have been processed pursuant to an encryption algorithm using a particular encryption "key."* ... Ruttiger makes no such provision. His remote control signals are not so keyed. Instead, Ruttiger simply provides an enabling signal to the intended remote controlled device.

'258 Prosecution File, at 60-61 (emphasis added). Unimpressed by the proffered distinction, the Examiner affirmed the rejection, noting that Ruttiger had identified "actuation keys 2" as having the (obvious) function of controlling and transmitting keyed motor control signals. According to the Examiner,

[t]he phrase "keyed motor control signals" implies nothing more than a motor control signal selected by a control key. This phrase should not be construed to [sic] applicant's invention of single remote controlled device with a particular transmitter and with a particular encryption key because claim [sic] does not set forth enough structure to warrant such interpretation.

Id. at 69. L & P responded by amending claims 1 and 31. The word "keyed" was deleted from the claim language and replaced with the word "encrypted." L & P explained that

[e]ssentially the Examiner has interpreted the phrase "keyed motor control signals" to mean nothing more than "a motor control signal selected by a control key." ... [There is a] difference between the Examiner's interpretation of the "actuation keys 2" of Ruttiger and encryption keys, encrypted signals, etc. In actuality, whether the claims call for "keyed" control signals or signals that have been processed pursuant to an encryption analog, each included the other, as is obvious from applicant's comments [that] ... "keyed motor control signals" in claim 1, for example, was specifically argued to mean that applicant's "keyed" control signals are signals "that have been processed pursuant to an encryption algorithm using a particular encryption "key." ...

[I]n order to clearly overcome any rejection based upon the Ruttiger patent, the word "keyed" has been changed to-encrypted-throughout most claims to clearly correspond to the arguments presented in the last amendment and, of course, to avoid the Ruttiger patent. Obviously, since Ruttiger does not provide encrypted signals of any kind for any purpose, the claims now should be allowed....

Id. at 78-79. Defendants argue the painfully obvious-that this language clearly indicated L & P's abandonment of the address/identifier "key" method exemplified by the second of the patent's preferred embodiments.

[11] [12] When a patent applicant has surrendered an element affecting the scope of a claim during prosecution, the "heavy presumption" favoring the ordinary and customary meaning of a claim term loses its considerable force. *See* SuperGuide Corp. v. DirecTV Enters., Inc., 358 F.3d 870, 874 (Fed.Cir.2004). The doctrine of prosecution disclaimer is intended to preclude patentees from seeking to recapture through claim construction meanings disclaimed during prosecution to overcome prior art rejections. *See* SanDisk, 415 F.3d at 1286. *See also* Elbex Video, Ltd. v. Sensormatic Elecs. Corp., 508 F.3d 1366, 1371 (Fed.Cir.2007). The doctrine "promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution." Omega, 334 F.3d at 1324.

[13] [14] [15] In making a disclaimer determination, a court is required to "assess whether a patentee relinquished a particular claim construction based on the totality of the prosecution history, which includes amendments to claims and arguments made to overcome or distinguish references." Rheox, Inc. v. RMT, Inc., 276 F.3d 1319, 1326 (Fed.Cir.2002). For the disclaimer doctrine to apply, the applicant must have "unequivocally" and "expressly" relinquished the element of the claim at issue. Omega, 334 F.3d at 1323; Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1374 (Fed.Cir.2008). *Cf.* id. at 1375 (prosecution disclaimer does not apply "if the applicant simply describes features of the prior art and does not distinguish the claimed invention based on those features."). *See also* Omega, 334 F.3d at 1324 (the Federal Circuit is loathe "to apply the doctrine of prosecution disclaimer where the alleged disavowal of claim scope is ambiguous."). FN2 L & P surrenderedthe identifier/address "key" embodiment to overcome the Examiner's prior art rejection. L & P did not simply describe the features of Ruttiger-it used them as a

sword to hew a distinction between its purported invention and the invention that Ruttiger had already taught. FN3

FN2. "[If] statements in the prosecution history are subject to multiple reasonable interpretations, they do not constitute a clear and unmistakable departure from the ordinary meaning of the term[s] [at issue]." Golight, Inc. v. Wal-Mart Stores, Inc., 355 F.3d 1327, 1332 (Fed.Cir.2004). *See also* Cordis Corp. v. Medtronic AVE, Inc., 339 F.3d 1352, 1359 (Fed.Cir.2003) (same).

FN3. While L & P's final argument is difficult to parse, the suggestion is that the Examiner gave too narrow a meaning to the term "encryption," which L & P argues should include any signal actuated by a control key that is distinguished by an identifier of some kind, whether an algorithm or a "keyed" address.

[16] Defendants take issue with L & P's definition of "encryption" by citing numerous definitions from technical dictionaries. The propriety of using dictionary definitions in claim construction has been a matter of disagreement among judges of the Federal Circuit. *Compare* Phillips, 415 F.3d at 1321 ("[H]eavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification.") *with* Vitronics, 90 F.3d at 1584 n. 6 ("[T]echnical treatises and dictionaries ... are worthy of special note. Judges are free to consult such resources at any time ... and may also rely on dictionary definitions when construing claim terms...."). Nonetheless, the trend favors the use of dictionary definitions, particularly in cases (like this one) where the patentee has not attempted to serve as its own lexicographer. *See* Phillips, 415 F.3d at 1318.

All of defendants' proffered dictionary definitions are closely aligned with their proposed construction of the claim term. *See, e.g.,* DICTIONARY OF SCIENCE AND TECHNOLOGY 742 (1992) (Encrypt: "[T]o convert plain text into an unintelligible form by means of a cipher system."). *Id.* at 743 (Encryption: "the conversion or encoding of information for transmission so as to prevent interpretation without the key for decryption."). MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 676 (5th ed. 1994) (Encryption: "[T]he coding of a clear text message by a transmitting unit so as to prevent unauthorized eavesdropping along the transmission line; the receiving unit uses the same algorithm as the transmitting unit to decode the incoming message.").

L & P proffers three supposedly countervailing definitions of "encrypt" or "encryption," drawn from on-line, non-technical dictionaries. The first is particularly unhelpful to L & P. CAMBRIDGE ADVANCED LEARNER'S DICTIONARY (on-line ed. 2007) (Encrypt: "[T]o change electronic information or signals into a secret code (= system of letters, numbers or symbols) that people cannot understand or use on normal equipment."). The other cited definitions offer scarcely more by way of support. MERRIAM WEBSTER (on-line) (Encrypt: to "encipher" or "encode"). AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed. on-line 2000) (Encryption: "1. to put into code or cipher. 2. *Computer Science*. To alter (a file, for example) using a secret code so as to be unintelligible to unauthorized parties.").

[17] Even assuming that these broad definitions from popular dictionaries are somehow helpful to L & P, it remains the case that in defining technical terms, scientific dictionaries are preferable over non-scientific dictionaries, "lest dictionary definitions ... be converted into technical terms of art having legal, not

linguistic significance." Dow Chem. Co. v. Sumitomo Chem. Co., Ltd., 257 F.3d 1364, 1372 (Fed.Cir.2001), quoting Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1478 (Fed.Cir.1998). *See also* AFG Indus. v. Cardinal IG Co., Inc., 239 F.3d 1239, 1248 (Fed.Cir.2001). The court will adopt defendants' proposed construction of the term "encrypted ... control signals" as more consistent with the intrinsic wording of the '258 patent, the prosecution history, and the technical definitions of the phrase accepted by those who practice the art.

B. "*Control Means*" *and* "*Receiver Means*"

[18] These terms are found in claims 1 and 31 of the '258 patent, and the parties agree that they are written in a "means-plus-function" format. "The first step in construing a means-plus-function claim limitation is to define the particular function of the claim limitation." Golight, 355 F.3d at 1333. The next task is to identify the structure disclosed in the specification that performs that function. *See* Biomedino, LLC v. Waters Techs. Corp., 490 F.3d 946, 950 (Fed.Cir.2007).

(i) "*Control Means*"

a. Function

[19] According to the language of claim 1, the "control means" is "operably coupled to the motor for controlling the motor, and hence, controlling positioning of the first portion with respect to the second portion, in response to reception of motor control signals." '258 patent, Col. 7, ll. 64-68. FN4 L & P argues that the function of the "control means" is simply to regulate the motor(s) in the positioning of the first and second segment (the head and foot settings) of the bed. Defendants, on the other hand, argue that the "control means" in both claims 1 and 31 must perform the additional function of first decrypting the received signals.

FN4. In claim 31, the control means is "operably coupled to the first and second motor and the first vibration means ... in response to reception of first encrypted motor control signals, second encrypted motor control signals, and first encrypted vibration control signals." '258 patent, Col. 10, ll. 32-42.

[20] "The court must construe the function of a means-plus function limitation to include the limitations contained in the claim language, and only those limitations." Golight, 355 F.3d at 1333, citing Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed.Cir.2002). Claim 1 states that the "control means" operates the motor "in response to reception of motor signals." '258 Patent, Col. 7, ll. 66-68. It additionally provides that the "receiver means" performs the function of "providing the encrypted motor control signals to the control means." Id., Col. 8, ll. 3-4. Claim 31 explicitly states that the control means acts "in response to reception of ... encrypted motor [and vibration] control signals." Id., Col. 10, ll. 38-41. Both claims clearly contemplate the receipt by the control means of encrypted signals prior to any control messages being relayed to the motors. It follows that the function of the control means is to receive an initiating signal, decode it, and then assign an appropriate response to the motors.

b. Structure

[21] [22] The scope of means-plus-function limitations "is limited to the structures disclosed in the written description that correspond to the recited functions, plus their equivalents.". Ballard Med. Prods. v. Allegiance Healthcare Corp., 268 F.3d 1352, 1362 (Fed.Cir.2001). The specification, as L & P argues,

clearly identifies controller 406 as a structure linked to the control function.

The controller 406 receives the control signal and determines a proper response. If the instruction relates to the lifting motors 103 and 104, the controller 406 issues an appropriate signal 411 to the lifting motor interface 408, which in turn provides an appropriate signal to whichever of the motors 103 or 104 the control is intended for.

'258 patent, Col. 5, ll. 15-21. However, the controller 406 is not the only structure linked with the specified function. The specification also provides that the various motors are

all controlled by a control unit 109. The control unit 109, in turn, responds to a remote control unit 111. The remote control unit 111, in this embodiment, comprises a wireless transmitter that transmits amplitude modulated keyed control signals 112 to the control unit 109. The control unit 109 receives these keyed control signals 112, decodes them, and controls the various motors in accordance therewith.

Id., Col. 3, ll. 60-68.

The control unit 109 incorporates a decoder 404. (The specification identifies the Motorola model MC 145027 decoder as the preferred exemplar). The decoder processes the keyed control signals, and then relays the signals to the controller 406.

The signal receiver 401 includes generally an antenna 402, a receiver 403, a decoder 404, and a key 405. The receiver 403 converts the amplitude modulated carrier signal transmitted by the remote control unit 111 into a recovered keyed control signal in accordance with well understood prior art technique. The recovered keyed control signal is then processed in the decoder 404 as a function of the key 405 (which is, of course, the same key 203 as that used in the remote control device 111 to provide a recovered control signal that corresponds to the original instruction initiated by the user upon actuating the remote control device keyboard 201. The controller 406 receives the control signal and determines a proper response.

Id., Col. 5, ll. 3-16 (missing closed parens in the original). Consistent with the patent language, the court construes the corresponding structures of the control means to consist of the control unit 109, the decoder 404, the key switches 405, the controller 406, and the motor lifting interface 408. FN5

FN5. Defendants argue that claims 1 and 31 are incapable of being construed and are invalid for indefiniteness because the decoder 404 identified in the specification (the Motorola model MC145027) is incapable of performing the decrypting function. In a letter to the court subsequent to the *Markman* hearing, defendants called the court's attention to the Federal Circuit's decision in Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech., 521 F.3d 1328 (Fed.Cir.2008). In Aristocrat, the Federal Circuit upheld a district court's ruling on summary judgment that the lack of disclosure of a specific structure or algorithm for performing the claimed functions rendered the claims invalid for indefiniteness. Id. at 1337-1338. At this juncture, the court will limit its review to claim construction as L & P has not had the opportunity to fully address defendants' argument in this regard. In any event, this is an issue more appropriately considered at summary judgment.

(ii) "*Receiver Means*"

[23] Although the parties agree as to the function of the receiver means (relaying encrypted motor control signals to the control means), they disagree about the structure. Although L & P argues that an antenna is not associated with the description of the receiver function, and is thus not part of the structure, the specification makes clear that the receiver does in fact include an antenna. '258 patent, Col. 5, ll. 3-4 ("The signal receiver 401 includes generally an antenna 402...." The structure associated with the receiver means is therefore the signal receiver 401, the antenna 402, and the receiver 403.

C. "*Body Supporting Surface*"

[24] All of the independent claims of the '258 patent require a "body supporting surface" (mattress) that has "at least first and second portions thereof being moveable with respect to one another." Fig. 1 portrays a drawing of an articulated bed, and the specification explains that

[i]n a well understood manner, the body supporting surface 101 comprises a mattress with an articulated skeletal structure that allows the mattress to be manipulated into various positions, thereby allowing an individual using the bed to raise his or her head, or legs and feet, as desired to obtain various therapeutic affects or degrees of comfort.

'258 patent, Col. 3, ll. 35-42. L & P argues that this term does not require construction, as it simply means "a surface that supports a body." Defendants, on the other hand, maintain (for the sake of argument and no other apparently discernible reason) that the term should be interpreted by tracking the language of the preferred embodiment, which posits "an articulated skeletal structure that allows the mattress to be manipulated into various positions."

[25] "It is a familiar principle of patent law that a claim need not be limited to a preferred embodiment [and the] drawings in the patent are merely a 'practical example' of the invention." Cordis, 339 F.3d at 1365, citing Lampi Corp. v. Am. Power Prods., Inc., 228 F.3d 1365, 1378 (Fed.Cir.2000). *See also* Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d 855, 865 (Fed.Cir.1988) ("References to a preferred embodiment, such as those often present in a specification, are not claim limitations."). In the interest of juror comprehension, the court will construe this disputed term to mean "a mattress with at least two moveable parts."

D. "*Vibration Means*"

[26] This term appears in claims 8 and 31. The parties agree that it is to be treated as a means-plus-function claim, and they essentially agree on the function-causing the bed to vibrate. While not explicitly stated, the parties also agree that the associated structure is the two vibration motors. The dispute centers on the location of the vibration motors: defendants claim that the motors must be *inside* the mattress, while L & P contends that they need only be located so as to be able to vibrate the bed. (This is yet another instance of a hotly contested issue that has no apparent consequence). While the specification describes the preferred embodiment as having a body supporting surface which has "disposed therewithin" two vibrating motors, ' 258 patent, Col. 3, l. 48, the court again notes that preferred embodiments are not claims limitations. *See* Laitram Corp., 863 F.2d at 865. The court will therefore construe the term consistent with L & P's proffered construction.

E. "*Powered By No More Than 24 Volts DC*"

This term is found in claims 4, 12, and 24-30. Claim 4, which is typical of these disputed claims, teaches an

articulated item of recumbent furniture, "wherein the motor, control means, and wireless receiver means are each powered by no more than 24 volts DC." '258 patent, Col. 8, ll. 11-15. The specification states that one of the objects of the invention is to reduce the risk of electric shock to the user. Typically, adjustable beds

are provided with AC power (50 or 60 Hz at various known voltage levels, such as 110, 120, or 240 volts), and this power is used to power the motors. The use of such levels poses a potential risk to the user of the bed; a short circuit between the user and the AC power, however inadvertent or brief, can be life threatening.

Id., Col. 1, ll. 57-63. Because these claims speak for themselves-they all require that the "motor, control means, and wireless receiver means are each powered by no more than 24 volts DC"-it is not necessary for the court to construe the term further. *See* Vivid Techs., 200 F.3d at 803.

F. "*Disposed within the Frame Means*"

[27] This term appears in claims 3 and 11. Claim 3 reads: "The articulated article of furniture of claim 2, wherein the motor, control means, and wireless receiver means are all disposed within the frame means." '258 patent, Col. 8, ll. 8-10. L & P argues that this should be read to position the components "in the area defined by the frame." Defendants seek to add an additional element to the term, arguing that it should be read as "contained within a case or enclosure formed by the frame that covers and protects such components." Although defendants correctly note that the specification is silent as to the configuration of the frame (the court takes judicial notice of the fact that beds even in ancient times were typically rectangular in shape and adapted to the needs of the human form), the court cannot fathom the justification (or source) for importing defendants' "protective" element into the claim. The court will therefore adopt L & P's construction.

2. ***The*** '423 Patent

A. "*Resilient Material*"

[28] This term is found in claims 1, 12, and 13 of the '423 Patent. Claim 1 reads

a massage motor assembly comprising ... a resilient material disposed in the outer housing between the massage motor housing and the outer housing, the massage motor housing not directly contacting either the outer housing or the rigid second support section, the resilient material reducing an operational noise of the massage motor.

'423 patent, Col. 5, ll. 22-27. Defendants argue that the term must be treated as a means-plus-function limitation, and that the term "material" does not connote a particular structure or substance. In defendants' view, the term "resilient" specifies a characteristic of the material, but not what it consists of. L & P for its part argues that the need for a means-plus-function analysis is obviated by the fact that the structure is the resilient material itself. The specification provides that "the foam inner and top jackets 72, 78 and foam pad 82 can be made of any resilient material, for example, substantially the same flexible foam used for the mattress base 48." Id., Col. 3, ll. 59-62. L & P convincingly argues that the claims require only that the material be resilient in the ordinary connotation of the term-that is, a material capable of "returning to the original form or position after being bent, compressed, or stretched." RANDOM HOUSE UNABRIDGED DICTIONARY 1638 (2nd ed. 1993). The court adopts L & P's construction.

B. "*Housing*" and "*Contiguous*"

[29] These terms are found in claims 1, 12, and 13. Claim 1 teaches a "massage motor assembly comprising an outer housing mounted to the lower side of the rigid second support section, the outer housing having an opening contiguous with the opening on the lower side of the rigid second support section." '423 patent, Col. 5, ll. 13-17.

(i) "*Housing*"

While L & P argues that "housing" should be construed as "something that covers, protects, or supports," defendants argue that the term necessarily means a structure that "covers and protects," and not (in the disjunctive) one that merely "supports." The specification provides that

[t]he massage motor assembly 68 includes a massage motor 70 having a massage motor housing 71 surrounded by a foam enclosure or cocoon 73 disposed within an outer housing 74.... More specifically, the outer housing 74 is a generally rectangular enclosure having four sides 77, a top 79 and an upper opening 75.

'423 patent, Col. 3, ll. 33-44. However, again as noted, "unless required by the specification, limitations that do not otherwise appear in the claims should not be imported into the claims." N. Am. Container, Inc. v. Plastipak Packaging, Inc., 415 F.3d 1335, 1348 (Fed.Cir.2005), citing E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433 (Fed.Cir.1988). The court need not resort to the dueling dictionary definitions proffered by the parties. There is simply nothing in the specification or claim language that indicates that the term housing requires that the motor be completely covered. The court will therefore adopt L & P's construction.

(ii) "*Contiguous*"

[30] This term appears in claims 1 and 13. Claim 1 discloses a massage motor comprising

an outer housing mounted to the lower side of the rigid second support section, the outer housing having an opening contiguous with the opening on the lower side of the rigid support section.

'423 Patent, Col. 5, ll. 14-17. The wording in claim 13 is identical. Defendants argue that "contiguous" openings in the outer housing and the rigid second support section must be "substantially the same size and shape," and "aligned ... such that the entirety of the peripheries of the two openings touch or are in very close proximity to one another." L & P for its part argues that the term means nothing more than that the openings are "next to, neighboring, or adjacent to each other." From L & P's perspective, there is no requirement that the openings be the same size, shape, or that their peripheries touch (or come close to touching) one another.

"Contiguous," however, implies something more than what is suggested by L & P. The openings allow the massage motor (which is mounted on the foot platform) to at least partially penetrate the casing of the platform in order to provide a massage effect in the foot region of the bed. The specification provides

[b]eing placed over the opening 84 in the foot platform 46, as the motor 70 moves through its orbital motion, it moves partially into the opening 84 within the platform 46. Such motion is effective to transfer a massaging action to a user lying on the mattress 50.

'423 patent, Col. 4, ll. 34-39. The massage motor would not be able to move "partially into the opening" if the openings were simply contiguous and not similar in size and shape. That the openings be interconnected is a critical feature of the invention and the "only feasible design in the disclosure." Cordis Corp., 339 F.3d at 1365. The court will therefore adopt defendants' construction.

C. "*Pivotally Connected/Attached*"

[31] This term is found in claims 1, 10, and 12. Claim 1 provides "a rigid second support section having one end pivotally attached to one end of the rigid center support section." '423 patent, Col. 5, ll. 5-6. The parties disagree whether the ends must be fastened indirectly or directly, and whether the fastener must be a hinge or some other sort of pivot. These distinctions are unimportant for present purposes, as the parties agree that Section B must be able to pivot or rotate to Section A. The term will therefore be construed as "Section A having one end fastened, secured or joined to one end of section B such that section B may be pivoted or rotated relative to Section A."

3. *The* '576 Patent

A. "*First and Second Mechanisms for Controlling Operations of Said Head and Foot Motors*"

[32] Claim 1 teaches "a handheld control unit including first and second mechanisms for controlling operations of said head and foot motors." '576 patent, Col. 9, ll. 22-24. The parties agree that this is means-plus-function format, but disagree as to the function. Defendants argue that the first and second mechanisms must each separately control both the head motor and the foot motor. L & P argues that while the first and second mechanisms have the ability to control the two motors, they are not required to control both motors simultaneously.

The dispute is resolved by simply looking to the explicit language of the claims. Claim 5, which depends from claim 1, recites

[t]he bed assembly of claim 1 wherein said first mechanism controls operation of said head motor but not said foot motor and said second mechanism controls operation of said foot motor but not said head motor.

'576 patent, Col. 9, ll. 43-46. Claim 6 further teaches

[t]he bed assembly of claim 1 wherein said first mechanism operates both said head and foot motors to cause the mattress to assume a first predetermined mattress head-foot configuration, and said second mechanism operates both said head and foot motors to cause the mattress to assume a different second predetermined mattress head-foot configuration.

Id., Col. 9, l. 47-Col. 10, l. 5. The claim language compels the adoption of L & P's proffered construction.

[33] With regard to the structure, L & P argues that only buttons 78, 80, 82, and 84 are related to the control of the head and foot motors. But the buttons do not act in isolation. As defendants correctly note, the corresponding structure must also include the handheld remote 50, the encoder 116, the transmitter 124, the bed controller unit 48 (including the receiver 140, decoder 142, and logic circuitry 144), as well as buttons 78, 80, 82, 84, 90(1), 90(2), and 90(3).

B. "*Third Mechanism*" and "*Fourth Mechanism*"

[34] While the first and second mechanisms control the head and foot motors, claim 1 recites a "third mechanism for controlling an operation of [the] vibratory motor; wherein said third mechanism when actuated also stops any operation of said head and foot motors as a safety feature." '576 patent, Col. 9, ll. 24-28. Claim 2 recites a "fourth mechanism for controlling an operation of [the] foot vibratory motor, wherein said fourth mechanism when actuated also stops any operation of said head and foot motors as a safety feature." Id., Col. 9, ll. 34-37. As the claim language makes clear, the third and fourth mechanisms perform two functions: (1) controlling the operation of the vibratory motor; and (2) regulating (terminating) all movement of the head and foot motors.

C. "*Bed Assembly*"

This term is found in claims 1-5, and 12. Claim 1 teaches an adjustable massage bed assembly comprising:

a head motor for controllably raising and lowering a head section of a mattress;

a foot motor for controllably raising and lowering a foot section of the mattress;

a vibratory motor for imparting a massaging action to a portion of the mattress; and

a handheld control unit including first and second mechanisms for controlling operations of said head and foot motors, and a third mechanism for controlling an operation of said vibratory motor;

wherein said third mechanism when actuated also stops any operation of said head and foot motors as a safety feature.

'576 patent, Col. 9, ll. 13-27. Defendants argue that this should be construed as "a combination of articulated support plates, a cloth-covered foam layer, and a mattress, the foam layer and mattress being disposed atop the support plates." L & P, on the other hand, argues persuasively that none of the limitations that defendants seek to read into the claims appear anywhere in the claim language. The court moreover fails to understand why a jury would require special instructions to be able to grasp the meaning of a simple list of components of a vibrating bed.

ORDER

The claim terms at issue will be construed for the jury and for any other purpose necessary to this litigation in a manner consistent with the above rulings of the court. FN6 The parties will within fourteen (14) days of the date of this Order file a joint proposed Scheduling Order that will bring this case to an expedited resolution.

FN6. The court declines to construe the terms "mounted to the lower side"; "thigh center support section"; and "over the opening," all set out in the '423 patent, as their meaning is obvious.

SO ORDERED.

D.Mass.,2008.

L & P Property v. JTM, LLC

Produced by Sans Paper, LLC.