United States District Court,
D. Kansas.

KCJ CORPORATION,
Plaintiff.
v.
KINETIC CONCEPTS, INC., et al,
Defendants.

Civil Action No. 98-2047-KHV

Dec. 22, 1998.

Patentee of air flotation, ventilated mattress brought infringement action against competitor. On parties' motions to construe patent claim, the District Court, Vratil, J., held that: (1) "a lower, continuous, inflatable chamber" meant one non-interrupted inflatable chamber; (2) "substantially uniform airflow therethrough over substantially the entire plan surface area" meant air flow at substantially same rate at substantially all locations on surface; and (3) "air-permeable secondary wall means above said chamber upper wall portion and operably coupled with said chamber-defining means" meant that function of secondary wall means was to define, in cooperation with upper wall portion, inflatable compartment above lower chamber, and that two elements worked in concert to create inflatable chamber.

So ordered.

In patent for air flotation, ventilated mattress, "air-permeable secondary wall means above said chamber upper wall portion and operably coupled with said chamber-defining means" meant that function of secondary wall means was to define, in cooperation with upper wall portion, inflatable compartment above lower chamber, and that two elements worked in concert to create inflatable chamber, e.g. one which was not air tight but could receive and hold air; whatever means was used to operably couple must have created inflatable chamber between top wall and secondary wall.

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MEMORANDUM AND ORDER

VRATIL**, District Judge.**

KCJ Corporation has filed suit against Kinetic Concepts, Inc. and KCI Therapeutic Services, Inc., asserting that they willfully infringed plaintiff's U.S. Patent No. 4,631,767 [the '767 patent] by manufacturing and selling therapeutic low air loss mattress devices. This matter comes before the Court on motions pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995), aff'd, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), in which the parties ask the court to construe claim 1 of the '767 patent as a matter

of law. *See Plaintiff KCJ's Motion For Summary Judgment As To Claim Interpretation* (Doc. # 227) and *Defendants' Motion For Partial Claim Construction And For Summary Judgment Based On That Construction* (Doc. # 231), both filed October 21, 1998. FN1 Consistent with the evidence presented at a *Markman* hearing on December 17, 1998, the Court finds as a matter of law that claim 1 of the '767 patent has the meaning and scope set forth below.

FN1. In this memorandum and order the Court addresses only the issue of claim construction.

Claim Construction Standards

The construction of a patent is a question of law for the Court. Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996).

Background

On November 21, 1984, Myra Carr, Francis Brosig, and Robert Gottlieb applied to the United States Patent and Trademark Office (the "PTO") for a patent for a so-called Air Flotation Mattress "for use in the treatment of patients in hospitals, nursing homes and home care." Plaintiff's Ex. 2, Tab A, p. 1. On January 3, 1985, the applicants assigned their rights in the patent application to KCJ Corporation. FN2 Plaintiff's Ex. 2, Tab B.

FN2. Myra Carr, her husband Richard Carr, and Fran Brosig-Silvers formed KCJ Corporation on April 16, 1984. Myra and Richard Carr are now the only two shareholders of KCJ; Ms. Carr is president of KCJ.

The patent examiner rejected plaintiff's original application for obviousness based on prior art stating as follows:

Claims 1-4 and 7-10 are rejected under 35 U.S.C. s. 103 as being unpatentable over Schild et al in view of Gammons et al.

Schild et al shows an air mattress which consists of a pressure pad 28 enclosed within a removable surrounding cover 27. (See Fig. 4). The cover 27 forms a plenum with a ventilating support surface 25, air is pumped into the plenum and exists (sic) through passages 29. Note that Schild et al disclose that the pressure pad 28 could be replaced with a conventional air mattress, also note the embodiment of Fig. 3. Gammons et al teach that a pressure pad can also be used to provide body ventilation by providing passages 24 and 25 upon the pad surface. It would have been obvious to one of ordinary skill in the art to provide Schild's pressure pad with ventilating passages as taught by Gammons, also many differing materials could be used in the construction of Schild, any particular material would have been an obvious matter of choice.

Claims 5 and 6 are rejected under 35 U.S.C. as being unpatentable over Schild in view of Gammons as applied to claim 2 above, and further in view of Harris et al.

Harris et al teach that an air mattress can have parallel baffles with end manifolds, it would have been obvious to one of ordinary skill in the art to construct Schild's pressure pad in this fashion.

Nos, Lapidus, Crane, and Stanton show relevant art.

Plaintiff's Ex. 2, Tab C, p. 2-3.

The Gammons Patent, U.S. Patent No. 4,347,633 was issued on September 7, 1982. The Schild Patent, U.S.

Patent No. 4,391,009 was issued on July 5, 1983. The Court has reviewed each of these patents, and provides only a brief summary of each here.

The Gammons patent disclosed an interdigitated mattress chamber with two air cells that interrupted each other along the length of the mattress and were alternately inflated and deflated to provide support for the patient's body. Gammon patent, Col. 4, 1.52-55; Fig. 4 & 6. The Gammons mattress had "vent holes in its top for ventilating the patient with inflation gas," *see* Gammons abstract, and the patent revealed a mattress with three rows of ventilating passages equidistant from one another. Gammons patent, Fig. 4. The patent observed that certain mattresses in the prior art had a tendency to "crawl" on the bed surface because the sequential inflation and deflation of parts of the mattress "act[ed] somewhat like raising and lowering alternating feet of a multi-legged caterpillar or worm." Gammons patent, Col. 1, 1.27-31. The Gammons patent also noted that different kinds of pads did not have the "crawl" problem because they did not alternately inflate air passages; instead, such pads were continuously inflated with a circulating liquid and adjoining sections did not sequentially inflate and deflate. Id., Col. 1, 1.52-58.

The Schild patent claimed a plenum chamber with a plurality of apertures. It also claimed "alternating inflatable support ... having a first set of bubble like cells which are interdigitated with a second set of aligned bubble like cells for giving sole support to ... [a] living body." Schild patent, Col. 6, 1.21-25. The Schild patent claimed a pump "coupled to said alternating inflatable support means for alternately inflating at a relatively high pressure said first and second interdigitated sets of aligned bubble like cells." Id., Col. 6, 1.27-30. As noted by the patent examiner, the Schild patent disclosed that the alternating inflatable support (pressure pad) could be replaced with a conventional air mattress.

After the patent examiner rejected plaintiff's original application for obviousness based on prior art, plaintiff amended its application, asserting that the amended claim distinguished the prior art cited by the patent examiner:

The structure defined in Claim 1 as amended is nowhere suggested or intimated in any of the prior art of record. The primary reference to Schild et al., Patent No. 4,391,009, describes with reference to Fig. 4 a body support including a central pad 28 and a surrounding envelope defined by sheets 25 and 26. The pad 28 may be an alternative pressure pad, or a conventional mattress. In neither event, however, does the Schild et al. reference suggest the structure now claimed. Thus, if use is made of an alternating pressure pad ... it is clear that the structure defined in Claim 1 is not met. Thus, the alternating pressure pad of the Schild et al. reference includes alternating sets of channels together with an air pump and valve assembly designed to "cause adjacent channels 12 to be inflated and deflated alternately so that the weight of the user is carried alternately on discrete regions defined by the two sets of channels." (citation omitted).

On the other hand, claim 1 as now amended specifically and unambiguously recites means for introduction of positive pressure air into the chamber in order to "continuously maintain positive air conditions throughout the entirety of operation of said mattress apparatus..." In no way does the alternating pad of the Schild et al. reference supply positive air pressure throughout the entirety of the chamber during all operations of the mattress. Indeed, this is specifically to be avoided in Schild et al. and to this end the respective channels are alternately supplied with positive pressure air and then deflated. Moreover and very importantly, the Schild et al. reference does not provide an internal or lower chamber having air permeable upper wall means as clearly claimed in Claim 1. To the contrary, the upper sheet 11 of the pad 28 is formed of "plastic", and the two sheets 11 are hermetically sealed together (see col. 3, lines 28 ff.). Obviously, Schild et. al. does not employ an upper wall which is constructed "for substantially uniform passage of air therethrough over substantially the entire plan surface area of said upper wall", as is specifically recited in Claim 1 as amended.

The Gammons et al. reference is likewise very different from the structure as claimed in the present claims. In Gammons et. al. the mattress 3 has two sets of independent passages which are alternately inflated by

pumping means 10.

Above the mattress 3 is provided a diffusion pad 4 of open cell foam material. During inflation of either of the passages 13 or 14, vent holes 24 and 25 discharge a portion of the ventilating gas for an attempt to ventilate the patient through the porous pad 4. Here again, though, it will be readily perceived that Gammons et al. does not employ a chamber having an upper wall which is constructed for substantially uniform air flow through substantially the entire plan surface of the upper wall. Moreover, Gammons et al. does not provide means for continuously maintaining positive air pressure conditions throughout the entirety of the lower chamber during the entirety of the operation of the mattress apparatus. As noted with respect to the Schild et al. reference, the alternating inflation-deflation concept is the antithesis of the structure now claimed.

Plaintiff's Ex. 2, Tab D., 4-5.

On December 30, 1986, the PTO issued KCJ the '767 patent. In doing so it approved Claim 1, including the amendments to the claim which are set forth in italics below:

We claim:

1. "An air flotation, ventilated mattress apparatus comprising:

[a)] means defining a lower, *continuous,* inflatable chamber having an air-permeable, flexible upper wall *portion,*

[b)] *said upper wall portion being constructed for substantially uniform airflow therethrough over substantially the entire plan surface area of said upper wall portion;*

[c)] air-permeable secondary wall means above said *chamber* upper wall portion and operably coupled with said chamber-defining means,

[d)] *said secondary wall means being constructed for substantially uniform passage of air therethrough over substantially the entire plan surface area of said secondary wall means,*

[e)] said secondary wall means and upper wall cooperatively defining therebetween an inflatable compartment above said chamber; and

[f)] means for continuously introducing positive pressure air into said chamber in order to *continuously maintain positive air pressure conditions throughout the entirety of said chamber during the entirety of operation of said mattress apparatus and to* inflate both said chamber and compartment by passage of said air into said chamber and thence through said upper wall *portion and thereby maintain positive air pressure conditions in said compartment,* and to cause *said* continuous passage of air through said secondary wall means,

[g)] said mattress apparatus being free of solid internal support structure [capable of] *for* supporting a patient,

[h)] said air introduction means, upper wall portion and secondary wall means being cooperatively configured and arranged for continuous passage of sufficient *positive pressure* airflow [under pressure] through the chamber, upper wall *portion,* compartment, and secondary wall means *for even, substantially uniform flow of air from said mattress apparatus* so that a person lying atop the secondary wall means is supported by said [pressured] *pressurized* air without the presence of weight-supporting structure within said mattress apparatus."

'767 patent, Col. 6, l. 7-46 (letters added for ease of discussion).

Claim Construction

[1] In construing patent claims, the Court should "look first to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996) (citing Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed.Cir.1995)), aff'd, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The Court must determine how the claim would be interpreted by one of ordinary skill in the art at the time the patent was issued. Markman, 52 F.3d at 986.

[2] [3] The analysis begins with the words of the claims. The language of the claim is to be given its ordinary meaning to a person of ordinary skill in the relevant art, unless it appears from the patent and the file history that the terms were used differently by the inventor. Intellicall, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1387 (Fed.Cir.1992). Thus, a patentee is not limited to ordinary dictionary definitions of terms, but is free to be his or her own lexicographer. Fromson v. Advance Offset Plate, Inc., 720 F.2d 1565, 1569 (Fed.Cir.1983).

"Claims must be read in view of the specification, of which they are a part." Markman, 52 F.3d at 979. The specification includes a written description of the invention and a best mode or preferred embodiment of the invention. *Id*. "The specification must enable a hypothetical person having ordinary skill in the art to make and use the invention, and so is typically drafted in some sense as an interpretive guide in reading the claims." MediaCom Corp. v. Rates Technology, Inc., 4 F.Supp.2d 17, 25 (D.Mass.1998). The limitations in particular embodiments should not be read into the claims, although the Court may use the embodiments as definitional guides for words in the claims. Ethicon Endo-Surgery, Inc., v. U.S. Surgical Corp., 93 F.3d 1572, 1574-76 (Fed.Cir.1996). The Court should also consider the prosecution history or "file wrapper," if in evidence, to ascertain the meaning of any claim. Markman, 52 F.3d at 979. The construction of the patent may be confirmed by the inventor's understanding of the claimed invention. *Id*. "Although the prosecution history can and should be used to understand the language used in the claims, it too cannot enlarge, diminish, or vary the limitations in the claims." *Id*. (further quotations and citations omitted).

[4] Finally, the Court may consider extrinsic evidence, including publications, dictionaries, and expert testimony, if necessary to assist in determining the meaning or scope of terms in the claims. Vitronics Corp., 90 F.3d at 1583. Extrinsic evidence "is to be used for the court's understanding of the patent, not for the purpose of varying or contradicting the terms of the claims." Markman, 52 F.3d at 981. "But this evidence is not for the purpose of clarifying ambiguity in claim terminology." Id. at 986. The claims themselves set the metes and bounds of the inventor's right to exclude others from practicing the invention.

Adhering to the above legal principles, the Court received evidence at the *Markman* hearing for the purpose of better understanding the technology of ventilated medical air mattress devices. The parties disagree on the proper construction of several terms in Claim 1 of the '767 patent and at the hearing, expert witnesses for both sides expressed legal opinions as to how those terms should be construed. The Court has afforded such testimony no deference and considered it merely as an extension of counsels' legal arguments. *See* Markman, 52 F.3d at 983 (inventor and patent attorney testimony about claim construction is legal opinion entitled to no deference).

The claim language which the Court must construe is set forth below.

A. Construction of Clause (a): "means defining a lower, continuous, inflatable chamber having an air-permeable, flexible upper wall portion"

The '767 patent claims an air flotation, ventilated mattress apparatus comprising, among other things, "means defining a lower, continuous, inflatable chamber having an air-permeable, flexible upper wall portion." The parties disagree whether such language claims one *or more* chambers, and focus their dispute around the meaning of the terms "a" and "continuous." Plaintiff alleges that the language claims a mattress apparatus with at least one chamber, which is "continuous" in that it is not interrupted, interdigitated, or broken in its structure. Defendants contend that the reference to "a ... continuous" chamber requires a single chamber which is not divided into separate sections that are independently capable of containing air. The parties agree that the term "continuous" means non-interrupted, i.e. extending without interruption or break. FN3 *See* Plaintiff's Ex. 1; Defendants' Ex. 404. Their principal dispute centers around the term "a" and whether the reference to "a ... chamber" encompasses multiple chambers.

FN3. Plaintiff asserts that the patent examiner rejected the original application because earlier patents described the use of interdigitated chambers that alternately inflated and deflated, and the amended application added the word "continuous" to distinguish that prior art. As noted above, all parties agree that "continuous" means non-interrupted and that an interdigitated mattress does not have a "continuous" chamber under that definition. "Continuous" is not synonymous with "non-interdigitated," however, to a person of ordinary skill in the relevant art. Moreover, the Court is not persuaded from the patent and the file history that the term "continuous" was used by the inventor to mean "non-interdigitated."

Plaintiff cannot convincingly insist that "continuous" means *only* non-interdigitated. From all that appears in the patent record, the examiner did not reject the original application on the basis that it failed to distinguish prior art with reference to interdigitated chambers. The examiner found that plaintiff's device combined the pressure pad of Schild's with ventilating passages taught by Gammons and after noting that "the Schild et al disclosed that the pressure pad could be replaced with a conventional air mattress," concluded that because "Harris et al teach that an air mattress can have parallel baffles with end manifolds," it would have been obvious to one of ordinary skill in the art to construct Schild's pressure pad in that fashion. Plaintiff's Ex. 2, Tab C, p. 3. The language which the patent examiner used in rejecting the original application does not suggest that he read the original application to claim an interdigitated mattress. In fact, the record clearly shows that he read the original application to include an air mattress with parallel baffles and end manifolds.

Moreover, although plaintiff relies heavily on the file history to argue that the patentee added the word "continuous" to distinguish its claims from the alternating pressure pads in Schild, this position ignores the fact that the Schild patent provided an alternative design claim with no alternating pressure.
Defendants focus on the claim language, which provides for "a ... chamber," and notes that references to that chamber are repeatedly made in the singular. Defendants cite patent cases using singular terms, where the Federal Circuit has ruled that a given device contains only one of the component. *See, e.g.,* Insituform Technologies, Inc. v. Cat Contracting, Inc., 99 F.3d 1098, 1105-06 (Fed.Cir.1996) ("[c]laim 1 refers to 'a cup' and 'the cup' repeatedly, suggesting that only one cup is involved"), *cert. denied,* 520 U.S. 1198, 117 S.Ct. 1555, 137 L.Ed.2d 703 (1997). Plaintiff counters that "[i]t is generally accepted in patent parlance that 'a' can mean one or more." North Am. Vaccine, Inc. v. American Cyanamid Co., 7 F.3d 1571, 1575-76 (Fed.Cir.1993), *cert. denied,* 511 U.S. 1069, 114 S.Ct. 1645, 128 L.Ed.2d 365.

[5] The articles "a" or "an" are ordinarily given a singular construction; a plural construction is appropriate only if the specification indicates that this was intended. 7 F.3d at 1576; *see also* Brita Wasser-Filter-Systeme GmbH v. Recovery Engineering, Inc., 1998 WL 473467 (N.D.Ill. Aug.7, 1998) (patent claimed "an" opening in the sleeve, and specification provided no embodiment with more than a single opening in the sleeve; the court read this to "disclose a single opening in the sleeve and no more."). A review of file history is particularly relevant where words were added to the claim to overcome specific prior art, see Lemelson v. General Mills Inc., 968 F.2d 1202, 1206 (Fed.Cir.1992), but that principle is of less assistance than basic common sense in resolving the matter at issue.

[6] The Court has little hesitation in concluding that the reference to "a ... continuous ... chamber" means exactly what it says: one continuous chamber. Plaintiff's position is untenable because the concept of multiple chambers is at fundamental odds with the concept of continuity, and discrete multiple chambers cannot be read into the patent without sacrificing the concept of continuity. It would be oxymoronic, for example, to speak of multiple continuous chambers: if any five chambers are non-interrupted, they are not five chambers but one. On the other hand, if five chambers are insular and merely contiguous, the mattress apparatus will not comprise means defining a non-interrupted chamber. A mattress apparatus might have five discrete chambers, each "continuous" only unto itself, but a person of ordinary skill in the relevant art would not describe such an apparatus as one which comprises "means defining a ... continuous ... chamber." Such a person more accurately would describe the apparatus as one which comprises "one lower, continuous, inflatable chamber or two or more lower, *non*-continuous, inflatable chambers." Nothing in the language of the claim, the patent, or the file history suggests such an interpretation.

In summary, the Court believes that the phrase "a lower, continuous, inflatable chamber" has a plain meaning in light of the '767 claims, the '767 specification, and the '767 prosecution history. A person of ordinary skill in the art of air bed engineering would read the phrase "continuous" to mean without interruption and the word "a" to mean one. Thus, the Court determines as a matter of law that the phrase "a lower, continuous, inflatable chamber" claims one non-interrupted inflatable chamber.

B. Construction of Clauses (b) and (d): Clause (b): "said upper wall portion being constructed for substantially uniform airflow therethrough over substantially the entire plan surface area of said upper wall portion." Clause (d): "said secondary wall means being constructed for substantially uniform passage of air therethrough over substantially the entire plan surface area of said secondary wall means."

The '767 patent claims an air flotation, ventilated mattress apparatus comprising, among other things, an upper wall portion and a secondary wall means that are "constructed for substantially uniform passage of air therethrough over substantially the entire plan surface area of said secondary wall means." FN4 The parties agree that when the claim language refers to "substantially uniformpassage of air," it means airflow which is substantially steady, constant or continuous, as opposed to fluctuating, intermittent or alternating over time. *See* Plaintiff's Ex. 1; Defendants' Ex. 408 ("person of ordinary skill in the art would read 'uniform airflow' to mean air flows at essentially the same rate...."). They disagree about *where* the patent claims the substantially steady air flow will occur. Plaintiff alleges that although the patent claims "substantially uniform passage of air therethrough *over substantially the entire plan surface area,*" the claim does not specify the spatial location through or at which air will flow. Rather, according to plaintiff, it means that air flow will be constant "wherever air flows." FN5 According to defendants, the requirement for "substantially uniform airflow ... over substantially the entire plan surface area" means that at substantially all locations on the plan surface, air flows at essentially the same rate.FN6

FN4. The patent claims for the upper wall portion and the secondary wall means are substantially identical, except that the upper wall portion claims "substantially uniform airflow" and the claim regarding the secondary wall means is for "substantially uniform passage of air." The difference is not material to any issue before the Court.

FN5. Among other problems with plaintiff's argument, it is hopelessly circular. As noted, plaintiff alleges that the claim language ("over substantially the entire plan surface area") does not specify the spatial location through or at which air will flow, but merely means that air flow will be constant "wherever air flows," and that "this is true" over substantially the entire plan surface. What plaintiff really argues, though it is less than candid in framing the issue, is that the Court should altogether ignore the claim requirement that air flow at a substantially uniform rate "over substantially the entire plan surface area."

FN6. Although defendants' motion refers to "are" flow, it is clear from defendants' supporting memorandum that the intended word is "air."

Plaintiff argues that if the Court were to adopt defendants' proferred construction, the invention would be impossible to make because when a patient lays on the mattress, air cannot flow at the points of contact.FN7 Plaintiff's interpretation ignores the fact that the "uniform air flow" clauses continue with "therethrough over substantially the entire plan surface area of [said secondary wall means and upper wall portion]. The claim demands that air flow through all locations on the surfaces. Defendants' construction would seem to give the proper meaning in context. Further, as defendants point out, the claim sets out a mattress with an "air permeable wall." Because the patent does not suggest that this permeability varies substantially from place to place, it is logical to conclude that the patent intended air flow which is uniform in space. This conclusion is supported by the fact that in distinguishing Schild, plaintiff mentioned that Schild included a non-permeable upper wall means. Further, the patent specification mentions many times the need to ventilate the patient's skin at all adjacent areas.

FN7. This argument must fail. The claim is for a mattress apparatus which has certain characteristics, including air flow "over substantially the entire plan surface." The patent does not claim that air flow will be unaltered when a human body lies on the surface; it only addresses the mechanical engineering of the apparatus.

[7] The Court finds that the phrase "substantially uniform airflow therethrough over substantially the entire plan surface area" has a plain meaning in light of the '767 claims, the '767 specification, and the '767 prosecution history. A person of ordinary skill in the art of air bed engineering would read "substantially uniform airflow" to mean airflow that does not substantially fluctuate over time. When added to the words "over substantially the entire plan surface," the claim requires that air flow at substantially the same rate at substantially all locations on the surface.

C. Construction of Clause (c): "air-permeable secondary wall means above said chamber upper wall portion and operably coupled with said chamber-defining means.

The '767 patent claims an air flotation, ventilated mattress apparatus comprising, among other things, "air-permeable secondary wall means above said chamber upper wall portion and operably coupled with said chamber-defining means." The parties disagree about the meaning of "operably coupled." According to plaintiff, the term means that "the two elements are in mutual relation so that the operation of one works with the other to achieve a common result." Plaintiff's Ex. 401. More specifically, plaintiff argues,

[t]his limitation means that there is at least one air-permeable cover sheet (or secondarywall) that overlies the upper wall of the chamber. This secondary wall is connected, linked, or attached in some way to the chamber described in clause (a). This would include any operable method of coupling a cover sheet with a mattress, and specifically includes attaching a cover sheet to a mattress with straps or elastic bands.

Defendants disagree, arguing that under the patent language the secondary wall means and the upper wall portion must be "chamber-defining" in order to be "operably coupled." Defendants' Ex. 414. More specifically, according to defendants,

this limitation speaks of a "secondary wall means" that is "operably coupled" with the lower chamber. Defendants move this Court to interpret "operably coupled" so that it requires a device which (1) possesses a compartment "defin [ed] between" the upper wall and secondary wall, and (2) is assembled so as to allow the inflation of that compartment and the flow of air through "substantially the entire plan surface area" of

the secondary wall.

Plaintiff contends that "operably coupled" means simply that those elements "be in such a mutual relation that the operation of one interacts with the operation of the other to achieve a common result-not that they are mechanically joined to provide a particular function described elsewhere in the claim." FN8 Plaintiff's Claim Construction Brief at 14. Plaintiff asserts that defendants' interpretation seeks to limit the claims to the preferred embodiment described in the specification or to the features of prototypes of the invention. Plaintiff asserts that it is improper to read into the claim limitations from the specification. Electro Medical Sys., S.A. v. Cooper Life Sciences, Inc., 34 F.3d 1048, 1054 (Fed.Cir.1994).

FN8. According to plaintiff, the coupling could be accomplished by snaps, zippers, buttons, velcro straps, elastic bands or other means.

At the *Markman* hearing plaintiff's expert testified that the term "operably coupled" should be read to mean two things that are mutually related so that the work of one thing is coupled with the work of the other. Plaintiff's expert testified that the term did not require that the items be physically attached. This opinion is not consistent with the meaning proferred in plaintiff's briefs.
Defendants first rely upon the claim language that the upper wall of the lower chamber should combine with the secondary wall to "cooperatively define [ ] therebetween an inflatable compartment above said chamber." '767 patent, col. 6, 1.23-25. The secondary wall must allow "substantially uniform passage of air therethrough over substantially the entire plan surface area of the secondary wall means." Id., 1.20-22. Defendants argue that to serve the goals of the operabl[e] coupl[ing] the device must have a compartment "defin [ed][ ] between" the upper wall and secondary wall and must be assembled to allow inflation of that compartment and the flow of air through "substantially the entire plan surface area" of the secondary wall.

Defendants also rely upon the specification that the upper compartment "inflate" and that the operable coupling should "defin[e]" the compartment "[ ]between" the upper wall of the lower chamber and the secondary wall. Defendants then point to the description of drawings that "the secondary wall 36 is detachably secured by means of a conventional zipper 38 at a point proximal to the joinder between the sidewall 24 and top wall 26. As seen in Fig. 3, an inflatable compartment 40 is defined between the top wall 26 and the secondary wall 36."

[8] In the '767 patent, the function of the secondary wall means is to define, in cooperation with the upper wall portion, an inflatable compartment above the lower chamber. '767 Patent, Col. 6, 1.21-23. The Court believes that the phrase "operably coupled with said chamber defining means" has a plain meaning in light of the '767 claims, the '767 specification, and the '767 prosecution history. A person of ordinary skill in the art of air bed engineering would read "operably coupled" to mean that two elements work in concert to create an inflatable chamber, e.g. one which is not air tight but can receive and hold air. Thus, whatever means is used to operably couple must create an inflatable chamber between the top wall and the secondary wall.

IT IS THEREFORE ORDERED THAT claim one of the '767 patent will as a matter of law be construed in a manner consistent with this memorandum and order.

IT IS FURTHER ORDERED THAT the parties shall file reply briefs regarding the outstanding motions for summary judgment on or before January 5, 1999.

IT IS FURTHER ORDERED THAT the status conference in this case previously set for January 7, 1999, shall be rescheduled for January 14, 1999 at 7:30 a.m.

D.Kan.,1998.
KCJ Corp. v. Kinetic Concepts, Inc.

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