

UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C. 20436

In the Matter of

**CERTAIN SLEEP-DISORDERED BREATHING
TREATMENT MASK SYSTEMS AND
COMPONENTS THEREOF**

Inv. No. 337-TA-1022

ORDER NO. 9: CONSTRUING TERMS OF THE ASSERTED PATENTS

(March 1, 2017)

The claim terms construed in this Order are done so for the purposes of this Investigation. Hereafter, discovery and briefing in this Investigation shall be governed by the construction of the claim terms in this Order. Those terms not in dispute need not be construed. *See Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n*, 366 F.3d 1311, 1323 (Fed. Cir. 2004) (noting that the administrative law judge need only construe disputed claim terms).

TABLE OF CONTENTS

	Page
I. Introduction.....	1
II. Relevant Law	1
III. The Asserted Patents.....	4
A. U.S. Patent No. 8,960,196.....	4
B. U.S. Patent No. 9,119,931.....	5
C. Level of Ordinary Skill	5
IV. Construction of Disputed Claim Terms	6
A. “openings to removably attach a pair of upper side straps” (’196 patent).....	6
B. “forehead support” (’196 patent)	6
C. “a similar material” (’196 patent)	7
D. “at least partly surrounding the bore” (’196 patent)	8
E. “an extension having a plurality of openings” (’196 patent)	9
F. “snap-fit” (’196 and ’931 patents)	10
G. “shroud module” (’931 patent)	11
H. “slot or receiving hole adapted to receive one of the upper headgear straps” (’931 patent).....	13
I. “one or more folds” (’931 patent).....	13
J. “cushion module” (’931 patent).....	15

The following abbreviations may be used in this Order:

ALJ	Administrative Law Judge
Compl.	Complainants or Complainants'
Decl.	Declaration
EDIS	Electronic Document Imaging System
IMB	Initial Markman Brief
PMB	Post-Markman "Bullet-Point" Brief
PTO	U.S. Patent and Trademark Office
Resp.	Respondents or Respondents'
RMB	Reply Markman Brief
Tr.	Transcript

I. Introduction

By publication of a notice in the *Federal Register* on September 22, 2016, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, the Commission instituted this investigation to determine:

[W]hether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain sleep-disordered breathing treatment mask systems and components thereof by reason of infringement of one or more of claims 23–86 of the '196 patent [U.S. Patent No. 8,960,196 and claims 1, 5–8, 11–14, 18–22, 25, 26, 28–31, 33–37, 40, 41, 43, 46, 48, 49, 51, 53–55, 57, 58, 60–65, 69–71, 77, and 78 of the '931 patent [U.S. Patent No. 9,119,931], and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

81 Fed. Reg. 65411 (Sept. 22, 2016).¹

The Commission named as complainants ResMed Corp. of San Diego, California; ResMed Inc. of San Diego, California; and ResMed Ltd. of New South Wales, Australia (collectively, “ResMed”). *Id.*

The Commission named as respondents Fisher & Paykel Healthcare Limited of Auckland, New Zealand; Fisher & Paykel Healthcare, Inc. of Irvine, California; and Fisher & Paykel Healthcare Distribution Inc. of Irvine, California (collectively, “RPH”). *Id.*

The Office of Unfair Import Investigations is not participating in this investigation. *Id.*

II. Relevant Law

“An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing.” *Markman v. Westview*

¹ I issued Order No. 7 on February 9, 2017, granting a motion to terminate twenty-two asserted claims based on the withdrawal of allegations related to those claims. The Commission has not yet determined whether or not to review Order No. 7.

Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*) (internal citations omitted), *aff'd*, 517 U.S. 370 (1996). Claim construction is a “matter of law exclusively for the court.” *Id.* at 970-71. “The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims.” *Embrex, Inc. v. Serv. Eng’g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000).

Claim construction focuses on the intrinsic evidence, which consists of the claims themselves, the specification, and the prosecution history. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (*en banc*); *see also Markman*, 52 F.3d at 979. As the Federal Circuit in *Phillips* explained, courts must analyze each of these components to determine the “ordinary and customary meaning of a claim term” as understood by a person of ordinary skill in art at the time of the invention. 415 F.3d at 1313. “Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.” *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp., Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001).

“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*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). “Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claims terms.” *Id.* at 1314; *see also Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (“In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to ‘particularly point [] out and distinctly claim [] the subject matter which the patentee regards as his invention.’”). The context in which a term is used in an asserted claim can be “highly

instructive.” *Phillips*, 415 F.3d at 1314. Additionally, other claims in the same patent, asserted or unasserted, may also provide guidance as to the meaning of a claim term. *Id.*

The specification “is always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” *Id.* at 1316. “In other cases, the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor.” *Id.* As a general rule, however, the particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Id.* at 1323. In the end, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be . . . the correct construction.” *Id.* at 1316 (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

In addition to the claims and the specification, the prosecution history should be examined, if in evidence. *Phillips*, 415 F.3d at 1317; *see also Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004). 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; *see also Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (“The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution.”).

When the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence (*i.e.*, all evidence external to the patent and the prosecution history, including dictionaries, inventor testimony, expert testimony, and learned treatises) may be considered. *Phillips*, 415 F.3d at 1317. Extrinsic evidence is generally viewed as less reliable than the patent itself and its prosecution history in determining how to define claim terms. *Id.* at 1317. “The court may receive extrinsic evidence to educate itself about the invention and the relevant technology, but the court may not use extrinsic evidence to arrive at a claim construction that is clearly at odds with the construction mandated by the intrinsic evidence.” *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 977 (Fed. Cir. 1999).

If, after a review of the intrinsic and extrinsic evidence, a claim term remains ambiguous, the claim should be construed so as to maintain its validity. *Phillips*, 415 F.3d at 1327. Claims, however, cannot be judicially rewritten in order to fulfill the axiom of preserving their validity. *See Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999). Thus, “if the only claim construction that is consistent with the claim’s language and the written description renders the claim invalid, then the axiom does not apply and the claim is simply invalid.” *Id.*

III. The Asserted Patents

A. U.S. Patent No. 8,960,196

Asserted U.S. Patent No. 8,960,196 (“the ’196 patent”) is titled, “Mask System with Interchangeable Headgear Connectors.” The ’196 patent issued on February 24, 2015, and the named inventor is Robert Edward Henry. ResMed asserts claims 23, 26, 28, 29, 31, 32, 33, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 51, 53, 54, 55, 56, 57, 60, 62, 63, 64, 65, 67, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, and 86 of the ’196 patent. 81 Fed. Reg. 65411 (Sept. 22, 2016) (Notice of Investigation); Order No. 7 (Initial Determination Terminating

the Investigation As to Certain Claims) (Feb. 9, 2017) (pending Commission review). Claims 23, 41, 57, and 73 are independent claims. *See* '196 patent.

B. U.S. Patent No. 9,119,931

Asserted U.S. Patent No. 9,119,931 (“the ’931 patent”) is titled, “Mask System.” The ’931 patent issued on September 1, 2015, and the named inventors are Errol Savio Alex D’Souza, Matthew Eves, David James Lockwood, Zoran Valcic, and Jamie Graeme Wehbeh. ResMed asserts claims 1, 5, 6, 7, 8, 11, 12, 14, 19, 20, 21, 22, 25, 26, 28, 30, 31, 33, 34, 35, 36, 37, 41, 43, 46, 48, 49, 51, 53, 55, 57, 58, 60, 61, 62, 63, 64, 65, 69, 70, and 78 of the ’931 patent. 81 Fed. Reg. 65411 (Sept. 22, 2016) (Notice of Investigation); Order No. 7 (Initial Determination Terminating the Investigation As to Certain Claims) (Feb. 9, 2017) (pending Commission review). Claims 1, 33, 43, 51, and 57 are independent claims. *See* ’931 patent.

C. Level of Ordinary Skill

ResMed’s expert Geoffrey Sleeper provided a declaration stating his opinion that a person of ordinary skill in the art would generally possess at least a degree in mechanical engineering, biomedical engineering, or a similar technical field, and at least five years of relevant product design and development experience. *See* Sleeper Decl. ¶ 13.² In Mr. Sleeper’s opinion, an increase in experience may compensate for less education, and an increase in education may compensate for less experience. *Id.*

FPH’s expert Jason Eaton provided a declaration stating his opinion that a person of ordinary skill in the art would have had at least a bachelor’s degree in mechanical engineering, biomedical engineering, or other similar type of engineering degree, combined with at least two

² The Declaration of Geoffrey Sleeper is attached as an exhibit to ResMed’s Initial Claim Construction Brief.

years of experience in the field of masks, respiratory therapy, patient interfaces, or relevant product design experience. *See* Eaton Decl. ¶¶ 22-26.³

In view of the expert testimony, I find that a person of ordinary skill in the art with respect to the asserted '196 and '931 patents would have at least a bachelor's degree in mechanical engineering, biomedical engineering, or a similar technical field, with at least two years of relevant product design experience. An increase in experience could compensate for less education, and an increase in education could likewise compensate for less experience. I reserve the right to amend this determination in my final initial determination if new, persuasive information on this issue is presented at the evidentiary hearing.

IV. Construction of Disputed Claim Terms

A. “openings to removably attach a pair of upper side straps” ('196 patent)

The claim term “openings to removably attach a pair of upper side straps” is recited in claim 73 of the asserted '196 patent. During the *Markman* hearing, I proposed that this term be construed to have its plain and ordinary meaning. *Markman* Tr. at 17. Both ResMed and FPH agree with this approach. *See* Compl. PMB at 1; Resp. PMB at 1.

Accordingly, I construe the claim term “openings to removably attach a pair of upper side straps” to have its plain and ordinary meaning.

B. “forehead support” ('196 patent)

The claim term “forehead support” is recited in claims 23, 32, 41, 48, 54, 57, 61, 64, and 70 of the asserted '196 patent. During the *Markman* hearing, I proposed that this term be construed to mean “a member to provide support between the mask system and the patient's

³ The Declaration of Jason Eaton is attached as an exhibit to FPH's Initial Claim Construction Brief.

forehead.” Markman Tr. at 20-21; 28. Both ResMed and FPH agree with this construction.⁴ *See* Compl. PMB at 1-2; Resp. PMB at 1.

Accordingly, I construe the claim term “forehead support” to mean “a member to provide support between the mask system and the patient’s forehead.”

C. “a similar material” (’196 patent)

The claim term “a similar material” is recited in claim 80 of the asserted ’196 patent. ResMed argues that this term should be construed to mean “a like material,” whereas FPH argues that this claim term is indefinite. *See* Compl. IMB at 11-14; Resp. IMB at 12-15.

Having considered the arguments of the parties, I have determined that the claim term “a similar material” should be construed to have its plain and ordinary meaning. This construction is consistent with ResMed’s proposed construction of “a like material,” which substitutes the word “like” for “similar” without adding significantly to the understanding of the claim term. Indeed, ResMed agrees with construing “a similar material” to have its plain and ordinary meaning. *See* Compl. PMB at 3.

I am not persuaded by FPH’s argument that the claim term “a similar material” is indefinite. Indefiniteness must be proved by clear and convincing evidence, and FPH has not met that burden here. *See Dow Chem. Co. v. Nova Chems. Corp. (Can.)*, 809 F.3d 1223, 1227 (Fed. Cir. 2015). FPH needs to show that this claim term, when read in light of the specification and the prosecution history, fails to inform those skilled in the art — with reasonable certainty —

⁴ ResMed agrees with my construction but “for clarity . . . addresses whether the construction allows a member separate from the claimed headgear connector.” *See* Compl. PMB at 1. In its post-*Markman* brief, ResMed takes the position that “the asserted claims require the headgear connector to include the forehead support.” *Id.* at 2.

about the scope of the invention. *Id.*; *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

The claim term “a similar material” is not indefinite because it has a common understanding to those skilled in the art. *See* Sleeper Decl. ¶¶ 25-27. FPH’s indefiniteness argument fails to consider the plain meaning of the claim language, and also fails to consider the teachings of the patent specification. The specification provides an example where “a similar material” includes materials with a comparable composition (*e.g.*, polycarbonate) or comparable physical properties (*e.g.*, substantially rigid, non-malleable, plastic material). ’196 patent at col. 4, lns. 52-56. In my view, this passage provides guidance to a person skilled in the art as to what does and does not constitute the claimed “a similar material.” For instance, a person of skill in the art, having read the ’196 patent, would probably not consider materials such as metal, wood, or glass “a similar material.”

Accordingly, I construe the claim term “a similar material” to have its plain and ordinary meaning.

D. “at least partly surrounding the bore” (’196 patent)

The claim term “at least partly surrounding the bore” is recited in claim 41 of the asserted ’196 patent. ResMed argues that this claim term should be construed to mean “at least partly enclosing or encircling the bore,” whereas FPH argues that this claim term is indefinite. *See* Compl. IMB at 14-16; Resp. IMB at 16-20.

Having considered the arguments of the parties, I have determined that the claim term “at least partly surrounding the bore” should be construed to mean “surrounding the bore greater than zero percent, up to and including one hundred percent.” This construction is consistent with ResMed’s proposed construction of “at least partly enclosing or encircling the bore,” which

substitutes the words “enclosing” and “encircling” for “surrounding” without adding significantly to the understanding of the claim term. Indeed, ResMed agrees with construing “at least partly surrounding the bore” to mean “surrounding the bore greater than zero percent, up to and including one hundred percent.” *See* Compl. PMB at 3; *see also* Markman Tr. at 53-55 (discussion of the ALJ’s proposed construction).

Moreover, I find that FPH has not met its burden to show that the claim term “at least partly surrounding the bore” is indefinite by clear and convincing evidence. The words comprising the claim term have plain meanings that are understood by a person skilled in the art. *See* Sleeper Decl. ¶¶ 29-31. In particular, the concept of one object partly surrounding another object is understood by those skilled in the art. *See id.*

Accordingly, I construe the claim term “at least partly surrounding the bore” to mean “surrounding the bore greater than zero percent, up to and including one hundred percent.”

E. “an extension having a plurality of openings” (’196 patent)

The claim term “an extension having a plurality of openings” is recited in claim 73 of the asserted ’196 patent. During the *Markman* hearing, I proposed that this term be construed to have its plain and ordinary meaning. Markman Tr. at 60-61. Both ResMed and FPH agree with this approach.⁵ *See* Compl. PMB at 3; Resp. PMB at 2-3.

Accordingly, I construe the claim term “an extension having a plurality of openings” to have its plain and ordinary meaning.

⁵ FPH agrees with my construction “with the understanding that, within a given extension, more than one (or a ‘plurality of’) opening(s) is required, as stated by Fisher & Paykel Healthcare during the Claim Construction hearing.” Resp. PMB at 3 (citing Markman Tr. at 61).

F. “snap-fit” (’196 and ’931 patents)

The claim term “snap-fit” is recited in claims 23, 41, 57, 69, and 73 of the asserted ’196 patent, as well as in claims 5, 22, 26, 28, 33, 37, 43, 46, 51, 53, and 69 of the asserted ’931 patent. ResMed argues that this term should be construed to mean “a connection established when a first component including an undercut or protrusion, is deflected during a joining operation, after which the first component recovers elastically and engages a protrusion or undercut in a second component.” *See* Compl. IMB at 2-24. FPH takes the position that this claim term should be given its plain and ordinary meaning, but then argues that the plain and ordinary meaning should be “engagement of two components wherein a flexible member of one component is briefly deflected during assembly with a corresponding structure in the second component.” *See* Resp. IMB at 23-24.

The evidence submitted by the parties and the discussion of the claim term “snap-fit” during the *Markman* hearing lead me to the conclusion that the term is generally understood by persons skilled in the art. Indeed, FPH argues that no construction of the term is needed, and that it should be afforded its plain and ordinary meaning. *See* Resp. PMB at 3-4. By contrast, ResMed argues that construction of this term is needed, and that its proposed construction correctly embodies the key elements of “snap-fit” as that term is understood in the art. *See, e.g.,* Compl. PMB at 3-8.

At the *Markman* hearing, the dispute between the parties focused on whether or not FPH’s proposed construction could allow other types of mechanical fastenings, such as press fit, friction fit, or mechanical interlocks, to fall within the scope of the claimed “snap-fit.” *See* *Markman* Tr. at 76-77. In particular, ResMed raised its concern that FPH’s proposed

construction omits the fact that a snap-fit connection requires that a deflected part “recover[] elastically” after engaging with another part. *See id.* at 77-78.

Having reviewed the evidence submitted by the parties and having considered the arguments raised in the parties’ briefs and at the *Markman* hearing, it seems to me that the term “snap-fit” is commonly understood by persons having skill in the art. Moreover, although I am not considered a person of ordinary skill in the art, I could easily identify the buckles on a child’s car seat as a “classic” snap-fit. *See Markman Tr.* at 65-66. All things being equal, I would not construe the claim term “snap-fit” but instead give it its plain and ordinary meaning. Yet, the parties disagree as to how this claim term should be construed, and have maintained their disparate positions through post-*Markman* briefing. *See, e.g., Compl. PMB* at 3-8; *Resp. PMB* at 3-5.

To avoid future dispute as to the meaning of this claim term, I hereby construe “snap-fit” to mean “a connection established between two components wherein a flexible member of one component is briefly deflected during assembly with a corresponding structure in the second component, after which the deflected first component recovers elastically and engages the second component.” This construction addresses the concerns ResMed and FPH raised with respect to the other’s proposed construction. *See Markman Tr.* at 77-78; *Resp. PMB* at 4.

G. “shroud module” (’931 patent)

The claim term “shroud module” is recited in claims 1, 6, 12, 14, 20, 22, 26, 28, 33, 34, 35, 36, 37, 43, 46, 51, 57, 58, 63, and 65 of the asserted ’931 patent. ResMed argues that this claim term should be construed to mean “a module that partially or fully covers the frame of the cushion module.” *See Compl. IMB* at 25-29; *Compl. PMB* at 8-10. FPH argues that this term

should be construed to mean “component of the mask that partially covers, fully covers, or is mounted on a second component of the mask.” *See* Resp. IMB at 24-25; Resp. PMB at 5-6.

Each party cites to the same section of the patent specification in support of its proposed construction. Column 6, lines 1-5 of the '931 specification reads:

The term “shroud” will be taken to include components that partially or fully cover a second component within the illustrated embodiments. In an embodiment, the shroud may include the component that partially covers or is mounted on the frame components of the illustrated embodiments.

ResMed relies on the first sentence of this excerpt to support its construction, whereas FPH identifies both sentences of this excerpt in support of its construction. *See, e.g.*, Compl. PMB at 8 (citing '931 patent at col. 6, lns. 1-3); Resp. PMB at 5 (citing '931 patent at col. 6, lns. 1-5).

The discussion of the meaning of “shroud module” in column 6 of the '931 patent specification is an instance of a patentee acting as his own lexicographer, insofar as the term “shroud module” does not have a generally understood meaning in the art. *See* Sleeper Decl. ¶¶ 39-45; Markman Tr. at 78-79. When reading column 6, I am left with the impression that ResMed’s proposed construction is more correct than the construction proposed by FPH. Specifically, the patent specification explicitly states that the claimed shroud module partially or fully covers a second component. Whether or not the claimed shroud module is mounted on the second component is optional according to my reading of the specification.

Accordingly, I have determined to construe the claim term “shroud module” to mean “a module that partially or fully covers a second component, such as the frame of the cushion module.” This construction comports with the intrinsic evidence at column 6, lines 1-5 of the '931 patent specification, which was cited by both parties in connection with this claim term.

H. “slot or receiving hole adapted to receive one of the upper headgear straps” ('931 patent)

The claim term “slot or receiving hole adapted to receive one of the upper headgear straps” is recited in claims 43 and 51 of the asserted '931 patent. During the *Markman* hearing, I proposed that this term be construed to mean “narrow opening or hole adapted to receive a headgear strap.” *Markman Tr.* at 92. Both ResMed and FPH agree with this construction. *See Compl. PMB* at 10; *Resp. PMB* at 6.

Accordingly, I construe the claim term “slot or receiving hole adapted to receive one of the upper headgear straps” to mean “narrow opening or hole adapted to receive a headgear strap.”

I. “one or more folds” ('931 patent)

The claim term “one or more folds” is recited in claim 33 of the asserted '931 patent. ResMed argues that this term should be construed to mean “one or more regions that may be bent, doubled or laid over themselves.” *See Compl. IMB* at 31-34. FPH argues that this term should be construed to mean “one or more portions of the cushion that contain a defined bend point or crease defined by the junction of side walls of fixed length throughout use.” *See Resp. IMB* at 28-40.

FPH’s argument in support of its proposed construction centers on a section of the specification titled “Concertina Section.” *See* '931 patent at col. 14, ln. 22 – col. 15, ln. 47. FPH argues that, inasmuch as this section teaches that the claimed “folds” are situated in a “concertina section” with a “bellows structure,” that the folds therefore must have “a defined bend point or crease defined by the junction of side walls of fixed length throughout use.” *See, e.g., Resp. IMB* at 28-40. FPH also illustrates its argument with example illustrations showing a concertina

musical instrument and an old-fashioned camera having a bellows structure. *Id.* at 28, 33. I find FPH's arguments unpersuasive.

I am not convinced that the patentee's use of the term "concertina section" in the patent specification indicates that the claimed "folds" must be structured like the regular folds found in a concertina musical instrument or other bellows structure. Figure 32-3 of the '931 patent, which illustrates the "concertina section," shows folds with variable shapes and sizes:

As best shown in FIG. 32-3, the folds may have different lengths, depths, and/or contours with respect to one another to optimize the concertina effect, e.g., provide sufficient degree of movement without compromising seal.

'931 patent at Fig. 32-3; col. 14, lns. 36-39.

Indeed, this section of the specification teaches that the purpose of the "concertina section" is to create a "concertina effect" whereby a degree of movement is imparted to the nasal bridge region of the sleep mask so that a seal is created between the mask and the wearer's face. *See, e.g.,* '931 patent at col. 14, lns. 23-42. This "concertina effect" could be accomplished by folds that do not "contain a defined bend point or crease defined by the junction of side walls of fixed length throughout use." I therefore find that the phrases "concertina section" and "concertina effect," as used in the '931 patent specification, are descriptions of the claimed invention, and not limitations of the claimed invention.

I turn now to ResMed's proposed construction of "one or more folds." ResMed argues for a plain meaning construction of the claim term, and its proposed construction of "one or more regions that may be bent, doubled or laid over themselves" is based on dictionary definitions of the word "fold." *See* Compl. IMB at 31-32. I see no reason to adopt ResMed's proposed

construction when it merely reflects the plain and ordinary meaning of the claim term without adding to the understanding of the term.

Therefore, I hereby I construe the claim term “one or more folds” to have its plain and ordinary meaning.

J. “cushion module” (’931 patent)

The claim term “cushion module” is recited in claims 1, 22, 26, 33, 37, 43, 51, 57, and 58 of the asserted ’931 patent. ResMed argues that this term does not need construction, but that if I determine that this term should be construed, it should be construed to mean “a module that includes a cushion.” *See* Compl. IMB at 35-39. FPH argues that this term should be construed to mean “a one piece component including both a cushion and a frame that cannot be separated from each other.” *See* Resp. IMB at 40-46.

The dispute between the parties centers on whether or not the claimed cushion module must be a “one piece component” that “cannot be separated,” a position supported by FPH. *See, e.g., Markman Tr.* at 125-126. Based on my reading of the intrinsic evidence, I cannot agree with FPH’s position.

For instance, the claim language itself demonstrates that the claimed cushion module does not need to be an inseparable unitary component. Independent claim 1, which ResMed asserts in this investigation, recites in relevant part:

a cushion module, comprising:

a rigid or semi-rigid frame defining a breathing chamber; and

a cushion to form a seal with the patient's face in a nasal bridge region, a cheek region and a lower lip/chin region of the patient's face,

wherein the cushion is constructed of a first, relatively soft, elastomeric material and the frame is constructed of a second material that is more rigid than the cushion . . .

'931 patent at col. 24, lns. 10-19.

Claim 16 of the '931 patent, which depends from claim 1, expressly discloses that the “cushion module” recited in claim 1 can itself comprise multiple components:

16. The mask system of claim 1, wherein the cushion module includes at least first and second cushion modules adapted to be provided to the shroud module, said at least first and second cushion modules being different from one another in at least one aspect.

'931 patent at col. 25, lns. 19-23.

Moreover, the specification of the '931 patent teaches that the “cushion module” is designed to be modular:

The mask system provides a modular design that allows different styles and/or sizes of the frame (also referred to as a frame module), shroud (also referred to as a shroud module), cushion (also referred to as a cushion module), and/or elbow (also referred to as an elbow module) to be interchanged or mixed and matched with one another to provide a more customized mask system for the patient. In addition, such design allows selected modules to be easily replaced, e.g., treatment requirements change, worn out or damaged, etc.


'931 patent at col. 17, lns. 19-27.

As a further example, the first embodiment of the invention described in the '931 patent and illustrated in Figures 1-8 shows a frame that can be separated from the cushion. *See* '931 patent at Figs. 1-8; col. 21, lns. 17-19.

Therefore, the claimed “cushion module” can accommodate different styles and sizes of cushions or cushion modules. Neither the claim language nor the specification requires that the “cushion module” be inseparable from the frame. Yet, the '931 patent does teach that the claimed “cushion module” includes a frame, a requirement that is not present in ResMed’s proposed construction. *See, e.g.,* '931 patent at col. 24, lns. 10-19 (claim 1).

I therefore construe the claim term “cushion module” to mean “a component including both a cushion and a frame.” *See* Markman Tr. 133-134.

SO ORDERED.

A handwritten signature in black ink, reading "Thomas B. Pender", with a long horizontal flourish extending to the right.

Thomas B. Pender
Administrative Law Judge

**IN THE MATTER OF CERTAIN SLEEP-DISORDERED,
BREATHING TREATMENT MASK SYSTEMS AND
COMPONENTS THEREOF**

337-TA-1022

CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **PUBLIC ORDER NO. 09** has been served upon the following parties via first class mail and air mail where necessary on

MAR 01 2017



Lisa R. Barton, Secretary
U.S. International Trade Commission
500 E Street, SW, Room 112A
Washington, DC 20436

FOR COMPLAINANTS ResMed Corp; ResMed INC. & ResMED LTD.

Richard A. Sterba, Esq..
FISH & RICHARDSON P.C.
1425 K Street N.W., 11th Floor
Washington, DC 20005

() Via Hand Delivery
() Via Express Delivery
() Via First Class Mail
() Other: _____

**FOR RESPONDENTS FISHER & PAYKEL HEALTHCARE LIMITED,
FISHER & PAYKEL HEALTHCARE INC., & FISHER & PAYKEL HEALTHCARE
DISTRIBUTION INC.**

Sheila N. Swaroop, Esq.
KNOBBE, MARTENS, OLSON & BEAR, LLP
2040 Main Street, Fourteenth Floor
Irvin, CA 92614

() Via Hand Delivery
() Via Express Delivery
() Via First Class Mail
() Other: _____