UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MISSOURI EASTERN DIVISION

REGAL BELOIT AMERICA, INC., et al.,) Plaintiffs,) v.) BROAD OCEAN MOTOR LLC, et al.,) Defendants.)

Case No. 4:16-CV-00111-JCH

MEMORANDUM AND ORDER

This matter is before the Court on Plaintiffs Regal Beloit, Inc.'s and Jakel Motors Incorporated's (together, "Regal Beloit") Motion for Claim Construction (ECF No. 53), and Defendants Broad Ocean Technologies, LLC's, and Zhongshan Broad Ocean Motor Co., Ltd's (together, "Broad Ocean") Motion for Claim Construction (ECF No. 54). The Motions have been fully briefed, a *Markman¹* hearing was held on May 15, 2017, and the Motions are now ready for disposition.

BACKGROUND

Regal Beloit designs and manufactures draft inducers and blowers for use in a variety of heating, ventilation, and air-conditioning ("HVAC") systems. On January 28, 2016, Regal Beloit filed this action, in which it asserts patent infringement claims against Broad Ocean in connection with U.S. Patent No. 5,620,302, entitled "Dynamic Condensate Evacuator for High Efficiency Gas Furnaces" ("the '302 Patent"); U.S. Patent No. RE40,818, entitled "Blower Housing with Maximized Interior Spacing" ("the '818 Patent"); and U.S. Patent No. 5,954,476, entitled "Snap-Fit Blower Housing Assembly and Seal Method ("the '476 Patent"). (ECF Nos.

¹ Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).

1, 39.) Defendant Zhongshan Broad Ocean Motor Co., Ltd. thereafter filed a Counterclaim against Regal Beloit, seeking a declaratory judgment that the claims of the asserted patents are invalid and not infringed by Broad Ocean. (ECF No. 42.)

The patents-in-suit pertain to improvements in blower design to improve the efficiency of the blower and HVAC system: the '302 Patent claims a drain structure that allows accumulated condensate to drain from a furnace blower housing during all operating modes of the impeller, the '818 Patent claims a blower with increased interior space for accommodating the blower impeller, and the '476 Patent claims an improved snap-fit design for a blower housing assembly. The Parties seek construction of five terms in Claims 1 and 2 of the '302 Patent, fourteen terms in Claim 16 of the '818 Patent, and eight terms in Claim 1 of the '476 Patent.² For a majority of disputed terms, Regal Beloit argues that no construction is necessary.

LEGAL PRINCIPLES GOVERNING CLAIM CONSTRUCTION

Claim construction is a matter of law reserved for the courts. *See Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). In determining the correct claim construction, the Court follows the "bedrock principle" 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) (en banc) (quotations and citations omitted). The words in the claim "are generally given their ordinary and customary meaning." *Id.* at 1312 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). "[T]he ordinary and customary

 $^{^2}$ The Court notes that since the filing of their Joint Claim Construction Chart, the Parties have limited the number of terms presented to the Court for construction. With respect to Claim 1 of the '302 Patent, the Parties agree that the term "[a]n impeller housing that drains condensate during all operating modes of an impeller," which is found in the preamble, is limiting. In addition, with respect to Claim 16 of the '818 Patent, the Parties agree that the term "[a] blower for a climate control device having a surface for mounting the blower to the device" requires no construction, and that the term "across" is properly construed as "from one end to the other."

meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Id.* at 1313 (citations omitted). The patentee may act as his own lexicographer, however, and give terms a meaning other than their ordinary meaning, "so long as the special definition is clearly stated in the patent specification or file history." *Vitronics*, 90 F.3d at 1582 (citations omitted).

The complexity and difficulty of claim construction will vary from case to case. *See Phillips*, 415 F.3d at 1314. "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Id.* "In such circumstances, general purpose dictionaries may be helpful," provided that "the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents." *Id.* at 1314, 1322-23 (quotation and citation omitted).

In other cases, however, "determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art." *Id.* at 1314. These cases often involve claim terms that do not have a readily apparent meaning and claim terms that have been used idiosyncratically by a patentee. *Id.* In these more complex instances of claim construction, the interpreting court often must consult "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." *Id.* (quotation and citation omitted). Courts are to look primarily to the "intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history." *Vitronics*, 90 F.3d at 1582 (citation omitted). Courts may also look to "extrinsic evidence, which consists of all evidence external to the patent and

prosecution history." *Phillips*, 415 F.3d at 1317 (quotation and citations omitted). However, extrinsic evidence "is less significant than the intrinsic record in determining the 'legally operative meaning of disputed claim language." *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004) (quoting *Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n*, 366 F.3d 1311, 1318 (Fed. Cir. 2004)).

The claims language itself provides "substantial guidance as to the meaning of particular claim terms." *Phillips*, 415 F.3d at 1314 (citations omitted). Context, for example, can provide important clues about the meaning of certain words within the claim. *Id.* (explaining that term "steel baffles'...strongly implies that the term 'baffles' does not inherently mean objects made of steel."). Similarly, "[b]ecause claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims." *Id.* (citations omitted).

"The claims, of course, do not stand alone." *Id.* at 1315. Rather, they are part of a "fully integrated written instrument[,]" and they must "be read in view of the specification, of which they are a part." *Id.* The Federal Circuit has emphasized repeatedly that 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." *Id.* (quoting *Vitronics*, 90 F.3d at 1582). The Court must not, however, import limitations from the specification into the claim. *Id.* at 1323. Interpreting courts therefore must walk a "fine line" between interpreting claims in light of the specification and improperly importing limitations from the specification. *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186-87 (Fed. Cir. 1998).

The prosecution history "consists of the complete record of the proceedings before the [Patent Trade Office ("PTO")] and includes the prior art cited during the examination of the

patent." *Phillips*, 415 F.3d at 1317 (citation omitted). "Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Id.* (citation omitted). The prosecution history can clarify the meaning of the claim terms "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." *Id.* (citations omitted). Because the prosecution history reflects the ongoing negotiations between the PTO and the inventor, however, it "often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* (citations omitted).

Extrinsic evidence includes "testimony, dictionaries, learned treatises, or other material not part of the public record associated with the patent." *MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1329 (Fed. Cir. 2007). The Federal Circuit has cautioned interpreting courts to be vigilant in their use of extrinsic evidence. *See Phillips*, 415 F.3d at 1319. This is primarily because items of extrinsic evidence, such as technical dictionaries, are not "created at the time of patent prosecution for the purpose of explaining the patent's scope and meaning. *Id.* at 1318. "Nonetheless, because extrinsic evidence can help educate the court regarding the field of the invention and can help the court determine what a person of ordinary skill in the art would understand claim terms to mean, it is permissible for the district court in its sound discretion to admit and use such evidence." *Id.* at 1319. Most importantly, extrinsic evidence must be "considered in the context of the intrinsic evidence." *Id.*

Finally, a district court need not construe every claim term challenged by a party. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1206-07 (Fed. Cir. 2010). Where the plain and ordinary meaning of the claim term resolves the parties' dispute, a court may properly refuse to employ an alternative construction. *See id.*

CONSTRUCTION OF DISPUTED CLAIM TERMS

With these standards in mind, the Court turns to the disputed claim terms. The Court will address the claim terms in the order in which they are set forth in the Parties' Joint Claim Construction Chart. The Court will also consider Broad Ocean's indefiniteness argument related to the '302 Patent together with the proposed claim constructions. *See Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1319 (Fed. Cir. 2008) (indefiniteness is matter of claim construction, and same principles that generally govern claim construction are applicable to determining whether allegedly indefinite claim language is subject to construction).

A. The '302 Patent, Claims 1 and 2

Claims 1 and 2 of the '302 Patent provide:

What is claimed is:

1. An impeller housing that drains condensate during all operating modes of an impeller, comprising:

a single-wall housing shell having *an interior surface*; and at least one aperture in said housing shell through which condensate is drained from said housing; and *wherein a portion of said at least one aperture is disposed above the housing shell interior surface so as to minimize the venturi effect of air flowing by said aperture responsive to rotation of the impeller in said housing shell.*

2. The impeller housing of claim 1, further comprising a *dished region* in the housing shell interior surface proximate said aperture.

'302 Patent, col. 6, ll. 65-67, col. 7, ll. 1-11 (emphasis on disputed terms added).

The Parties dispute construction of the following terms:

1. "venturi effect"

Regal Beloit proposes that the term is properly construed as "the drawing (suctioning) of

fluid into a fluid stream having a lower pressure than the drawn fluid, the lower pressure in the

fluid stream resulting from the fluid stream velocity." Regal Beloit argues that the '302 Patent

specification describes "venturi effect" as "suctioning," and that the Court need not resort to any

extrinsic evidence in reaching its construction. (ECF No. 53 at 12-14.)

Broad Ocean proposes that the term is properly construed as "a reduction in fluid pressure, and increase in fluid velocity, in a smaller diameter or volume section of a tube resulting from fluid passing from a larger diameter or volume section into the smaller diameter or volume section." Broad Ocean argues that the patent is "devoid of any explanation as to how the 'venturi effect' phenomenon allegedly occurs or takes place," and that it has proposed the classic and indisputable definition of the term, as it is used in fluid mechanics and dynamics and known to a person of ordinary skill in the art. For support, Broad Ocean relies on the Report and testimony of Dr. Roger Fales. (ECF No. 54 at 17-19.)

After careful consideration of the intrinsic record and the arguments made by the Parties, the Court construes the term to mean "the process by which fluid enters into a fluid stream having a lower pressure, the lower pressure in the fluid stream resulting from an increase in the fluid stream velocity." *See Phillips*, 415 F.3d at 1314-15. The Court derives this construction from, and finds that it appropriately comports with, the claim specification, which provides sufficient context for this term. *See, e.g.*, '302 Patent, col. 1, ll. 35-49 ("When the blower is energized (i.e., in operation), the suctional force developed by the venturi effect of air flowing across the drain connection opening was sufficient to discourage or prevent the liquid condensate from exiting the condensate drain tube..."), col. 5, ll. 3-7 ("when the draft inducer or the draft inducer or the draft inducer impeller is in operation, the venturi action caused by the rotating impeller creates a suction action in the drain connection thereby establishing a vacuum in the drain connection").

2. "so as to minimize the venturi effect of air flowing by said aperture responsive to rotation of the impeller in said housing shell"

Regal Beloit argues that the term requires no construction because there is nothing ambiguous about the phrase. Regal Beloit contends that "[i]n the context of claim 1 and the specification of the '302 Patent, one of ordinary skill in the art would understand that the venturi effect is the phenomenon which prevents condensate from draining when the impeller is rotating," and that "minimizing the venturi effect would permit condensate to drain when the impeller is rotating." (ECF No. 53 at 14-15.)

Broad Ocean argues that the term is indefinite because the Patent is devoid of any detail related to how the venturi effect (as that term is construed by Broad Ocean) is implicated, because "Claim 1 wholly fails to include the necessary structure of the subject matter which the inventor regards as the alleged invention," and because "the '302 Patent fails to provide any guidance as to what 'minimize' means or how to measure it." Broad Ocean also proposes, in the alternative, that the term is properly construed as "structure to increase the pressure, and decrease the velocity, of the fluid through the aperture drain." (ECF No. 54 at 19-21.)

The Court rejects Broad Ocean's argument that the term is indefinite. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014) ("a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention"). As Broad Ocean acknowledges, the '302 Patent describes the decrease in suctional forces resulting from the inclusion of depressed dished region in the housing interior surface. For reasons similar to those set forth above in connection with the "venturi effect," the Court construes the term to mean "structure to increase the pressure, and decrease the velocity, of the fluid, so as to allow fluid to pass through the aperture drain." The Court finds this construction consistent with the claim specification. *See, e.g.*, '302 Patent, col. 5, Il. 16-18 ("Simply, the portion of the dished region filled with condensate is not subject to the suction effect of the rotating impeller.")

3. "an interior surface"

Regal Beloit argues that the term requires no construction because the term is readily understood, and that although the term could be defined as "inside surface," it is unclear why such definition is necessary, since infringement does not depend upon it. Regal Beloit further proposes that, to the extent the Court deems construction necessary, the term is properly construed as "interior surface." (ECF No. 53 at 16-17.)

Broad Ocean contends that without construction there will be confusion as to what constitutes the "interior surface." Broad Ocean proposes that the term is properly construed as "the curved inside surface, having a uniform radius, of the outer wall of the housing shell." For support, Broad Ocean argues that the '302 Patent "only and repeatedly refers to and defines the interior surface of the housing shell in the specification and drawings as element 20 ('inside arcuate surface')," and that the "interior surface' is plainly defined as the curved/arcuate surface (20) which has a uniform radius that is 'parallel to the axis 18 of rotation (FIG.2.)." Broad Ocean further argues that the claimed "interior surface" of the housing shell "plays an extremely important role in the alleged invention, as it is the location of the 'dish region'..., as well as what is used to define the location of the claimed aperture." (ECF No. 54 at 22-23 (citing '302 Patent, col. 4, ll. 46-48, 56-63; col. 5, ll. 30-38, 60-62; col. 6, ll. 25-27, 58-59).)

Upon review of the intrinsic record and the Parties' arguments, the Court adopts Broad Ocean's proposed construction, "the curved inside surface, having a uniform radius, of the outer wall of the housing shell." The Court finds that this construction derives from the '302 Patent and is the best understanding of the term as it is used therein. *See Phillips*, 415 F.3d at 1314-15.

4. "wherein a portion of said at least one aperture is disposed above the housing shell interior surface"

Regal Beloit argues that the term requires no construction, and that to the extent the Court deems construction necessary, the term is properly construed as "wherein a portion of said at least one aperture is disposed above the housing shell interior." Regal Beloit urges that the claim language does not require that a portion of the aperture extend below the interior surface, and that the claim language is sufficiently broad to encompass an aperture in which no portion of the aperture is below the interior surface. (ECF No. 53 at 17-18.)

Broad Ocean proposes that the term is properly construed as "the aperture must have a portion of the opening extending above, and a portion of the opening extending below, the interior surface of the housing shell." Broad Ocean argues that the '302 Patent requires an aperture partially below and above the housing shell interior surface, and that the specification and prosecution history explain that the alleged invention will not operate without the claimed structure. (ECF No. 54 at 23-26.)

Upon consideration of the Parties' arguments, the Court agrees with Broad Ocean's proposed construction. Here, the specification requires and repeatedly explains that a portion of the aperture must be below the housing shell interior surface in order to collect condensate and achieve minimization of the venturi effect. *See, e.g.*, '302 Patent, col. 2, ll. 31-38 ("the bottom portion of the aperture extends below an interior surface of the housing shell to minimize the venturi effect....The interior surface of the housing shell further includes a dished region proximate the aperture, where the bottom of said dished region is arranged to correspond with a bottom edge of the aperture below the housing shell interior surface"), col. 5, ll. 29-36 ("the through opening 24 is arranged so the top portion 32a is above the inside arcuate surface 20 and the bottom portion 32b is below this surface 20. The top and bottom portions 32a,b are sized and

arranged with the dished region 26 so the vacuum condition in the drain connection 12a is broken at least when the level of condensate 22 accumulating in the dished region 26 reaches the inside arcuate surface 20."). In addition, during prosecution of the '302 Patent application, the applicants distinguished their alleged invention from a prior art reference based upon the claimed aperture's partial embedment in the housing shell:

In the claimed invention, the aperture has 'a portion...disposed above said housing shell interior surface so as to minimize the venturi effect of air flowing by said aperture responsive to rotation of the impeller in said housing shell.' Thus, the aperture is partially imbedded in the housing shell (the bottom portion of the aperture extends below the interior surface of the housing shell), so that an extreme pressure gradient is formed between the portion above the inner surface of the housing shell caused by the vacuum formed by impeller operation and the portion below the inner surface which allows for the condensate to drain. This design feature of the present invention, as claimed in claims 1 and 11, allows the weight of the condensate to overcome the negative pressure created during impeller operation.

(Def. Ex. 5, ECF No. 54.5 at 6-7.)

In view of the foregoing, the Court adopts Broad Ocean's proposed construction, "the aperture must have a portion of the opening extending above, and a portion of the opening extending below, the interior surface of the housing shell." *See Phillips*, 415 F.3d at 1314-15; *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323-26 (Fed. Cir. 2003) (doctrine of prosecution disclaimer "preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution"; prosecution disclaimer applies where disclaiming statements constitute "clear and unmistakeable" surrender of subject matter); *Poly-America, LP v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016) ("While disavowal must be clear and unequivocal, it need not be explicit.").

5. "a dished region"

Regal Beloit proposes that the term is properly construed as "region having a channel," arguing that this definition accurately reflects how one of ordinary skill in the art would have understood the phrase in view of the intrinsic record. (ECF No. 53 at 18-19.)

Broad Ocean proposes that the term is properly construed as "a depression below the interior arcuate surface."³ Broad Ocean argues that "the entirety of the '302 Patent and its prosecution history consistently require that the 'dished region' be a depressed area 'in' (i.e. 'below') the 'interior arcuate surface' of the housing." (ECF No. 54 at 26-28.)

For reasons similar to those set forth above in connection with "wherein a portion of said at least one aperture is disposed above the housing shell interior surface," the Court concludes that the '302 Patent requires a dished region in the form of a depression in the interior arcuate surface, and that the required limitation is an essential feature in carrying out the claimed objective—minimization of the venturi effect. *See, e.g.*, '302 Patent, col. 4, ll. 60-61 ("the bottom 30 of the dished region 26 is disposed below the inside arcuate surface"), col. 5, ll. 33-36 ("...so the vacuum condition in the drain connection 12a is broken before the level of condensate 22 accumulating in the dished region 26 reaches the inside arcuate surface 20"), col. 6, ll. 24-27 ("the dished region 126 is arranged so its bottom surface 30 is below the inside arcuate surface surface 20"). The Court therefore adopts Broad Ocean's proposed construction, "a depression below the interior arcuate surface." *See Phillips*, 415 F.3d at 1314-15.

³ Broad Ocean initially proposed that the term is properly construed as "a concave depression below the interior arcuate surface." (ECF No. 49.1 at 7.) In its briefs and at the *Markman* hearing, Broad Ocean agreed to eliminate the geometric qualification "concave" from its proposed construction, in the event the Court deemed such modification appropriate. (ECF No. 54 at 27 n.3; ECF No. 59 at 19.)

B. The '818 Patent, Claim 16

Claim 16 of the '818 Patent provides:

[The blower of claim 11, further comprising:] A blower for a climate control device having a surface for mounting the blower to the device, the blower comprising:

a blower housing top piece having a *peripheral edge* that *extends around the top piece*, a shaft hole extending through the top piece and a plurality of mounting fittings spatially arranged around the shaft hole for attaching a motor to the top piece with a shaft of the motor passing through the shaft hole,

a *blower housing annular wall* having a volute shape with a discharge pipe projecting from the annular wall, *the annular wall extending around the peripheral edge of the top piece*;

a plurality of *legs* spatially arranged around the *peripheral edge* of the top piece and projecting outwardly from the *peripheral edge* and outwardly from the annular wall, the *legs extending from the top piece peripheral edge across the annular wall to support the top piece in a position on an opposite side of the annular wall from the climate control device surface* when the blower is mounted on the device surface;

a plurality of fasteners extending across the annular wall, each fastener having a shaft with a driving end at one end of the shaft and a driven end at an opposite end of the shaft, each fastener shaft having a length that is positioned *adjacent and substantially parallel to the annular wall* for a majority of the shaft length, and *each fastener driving end seating against the top piece*; and,

a plurality of *lugs* spatially arranged around the top piece *peripheral edge* projecting outwardly from the *peripheral edge*, each *lug* has a lug hole, and the *plurality of legs extend downwardly from the plurality of lugs*.

'818 Patent, col. 11, ll. 22-54 (emphasis on disputed terms added).

The Parties dispute construction of the following terms:

6. "a blower housing top piece"

Regal Beloit argues that the term requires no construction, and that to the extent the Court

deems construction necessary, the term is properly construed as "a major component of the blower housing." Regal Beloit asserts that a blower housing typically has two major components consisting of an intake-side housing piece and a motor-mount housing piece; that, because Claim 16 of the '818 Patent "does expressly require that the top piece have 'a plurality of mounting fittings spatially arranged around the shaft hole for attaching a motor to the top piece,' the

blower housing top piece in Claim 16 must be the motor-mount housing piece"; and that Claim 16 does not require a blower housing bottom piece. Regal Beloit contends, however, that because the claim language itself identifies the requirements of the blower housing top piece, the Court does not need to define it. (ECF No. 53 at 21-22.)

Broad Ocean proposes that the term is properly construed as "one of the two blower housing parts that covers the bottom piece of the blower housing, and has integral legs that bridge across the annular wall of the bottom piece." Broad Ocean argues the '818 Patent specifically describes and claims a two-piece furnace blower housing: the "top piece' (58) is the cover that encloses the 'bottom piece' (60) (which houses the impeller), and is required to have integral 'depending legs' (84) extending down from its 'lugs' (80) which, when assembled with the 'bottom piece' (60), conform to the exterior surface (102) of the annular 'wall' (56) of the 'bottom piece' (6)." (ECF No. 54 at 28-32 (citing '818 Patent, col. 4, ll. 4-5; col. 5, ll. 17-18, 35-55).)

Upon consideration of the intrinsic record and the Parties' arguments, the Court rejects Regal Beloit's contention that Claim 16 of the '818 Patent does not does not require a blower housing bottom piece. *See, e.g.*, '818 Patent, col. 4, ll. 4-5 ("The top piece fits over the bottom piece to enclose the volute and form a casing for the blower"), col. 5, ll. 16-20 ("The top piece 58 covers over the bottom piece 60 to tightly enclose the blower housing 54 and prevent exhaust gases from leaking from the blower housing 54 during operation"). The Court further finds that the construction proposed by Broad Ocean derives from the '818 Patent and is the best understanding of the term as it is used therein. The Court therefore adopts Broad Ocean's proposed construction, "one of the two blower housing parts that covers the bottom piece of the

blower housing, and has integral legs that bridge across the annular wall of the bottom piece." *See Phillips*, 415 F.3d at 1314-15.

7. "peripheral edge"

Regal Beloit argues that the term requires no construction, and that to the extent the Court deems construction necessary, the term is properly construed as "peripheral edge." Regal Beloit contends that the term is clear in the context of the patent. (ECF No. 53 at 22-23.)

Broad Ocean proposes that the term is properly construed as "an outside border of a surface." Broad Ocean argues that its proposed definition provides detail and clarity necessary to understand and apply the claim term, and that the construction is consistent with dictionary definition and how a person of ordinary skill in the art would have understood the term. (ECF No. 54 at 32.)

Upon consideration of the Parties' arguments, the Court agrees with, and will adopt, Broad Ocean's proposed construction, "an outside border of a surface." *See Phillips*, 415 F.3d at 1314-15.

8. "extends around the top piece"

Regal Beloit argues that, for reasons similar to those asserted in connection with "peripheral edge," the term requires no construction. Regal Beloit further argues that to the extent the Court deems construction necessary, the term is properly construed as "extends around the top piece." (ECF No. 53 at 23.)

Broad Ocean proposes that the term is properly construed as "spans the entire circumference of the top piece." Broad Ocean argues that "the specification reflects that the 'peripheral edge' (78) must extend completely around the circumference, uninterrupted, of the top piece," and that no construction "will allow an interpretation that 'extends around' can be

less than completely around the 'top piece.'" (ECF No. 54 at 33 (citing '818 Patent, col. 5, ll. 31-34; col. 11, ll. 24-25).)

Upon consideration of the Parties' arguments, the Court finds that Broad Ocean's proposed construction is supported and entirely consistent with the intrinsic record. *See, e.g.*, '818 Patent, col. 5, ll. 31-34 ("The top piece 58 has an upper portion 74 which extends around and above the lower portion 66 and includes a seating surface 76 for the mechanical fasteners 40."). The Court will therefore adopt Broad Ocean's proposed construction, "spans the entire circumference of the top piece." *See Phillips*, 415 F.3d at 1315.

9. "blower housing annular wall"

Regal Beloit argues that no construction is required, and that, to the extent the Court deems construction necessary, the term is properly construed as "curved wall of the blower housing." Regal Beloit maintains that "[t]he annular wall of a blower housing need not be circular nor parallel to the axis of an impeller," and that "Claim 16 of the '818 Patent does not even require an impeller." (ECF No. 53 at 23-24.)

Broad Ocean proposes that the term is properly construed as "circular wall that is parallel to the axis of and envelops the impeller." Broad Ocean argues that the "'blower housing annular wall' is not part of the top piece, and is indisputably a separate structural element of the 'bottom piece." Broad Ocean further argues that the patent very clearly describes the claimed element: "The 'bottom piece' has 'an upstanding annular wall [56] extending outward from the bottom disk around the outer perimeter border. The upstanding annular wall has an interior surface that forms a portion of the volute for the blower housing." (ECF No. 54 at 33-34 (citing '818 Patent, col. 3, ll. 60-66; col. 6, ll. 3-12).)

Upon consideration of the intrinsic record and the Parties' arguments, the Court finds that the construction proposed by Broad Ocean derives from the '818 Patent and is the best understanding of the term as it is used therein. The Court will therefore adopt Broad Ocean's proposed construction, "circular wall that is parallel to the axis of and envelops the impeller." *See Phillips*, 415 F.3d at 1315.

10. "annular wall extending around the peripheral edge of the top piece"

Regal Beloit argues that the term requires no construction, and that, to the extent the Court deems construction necessary, the Court should refer to the "above constructions." (ECF No. 53 at 24.)

Broad Ocean proposes that the term is properly construed as "the annular wall of the bottom piece of the blower housing fits around the circumference of the blower housing top piece." Broad Ocean argues that that "fail[ure] to provide a finder of fact any construction will engender confusion and may result in error and an inability to locate the 'annular wall' of the 'bottom piece' and its required positioning with the 'peripheral edge of the top piece.'" Broad Ocean further argues that the '818 Patent "expressly provides that 'the blower housing comprises a bottom piece having a disk shaped bottom portion with an outer perimeter border and an upstanding annular wall extending outward from the bottom disk around the outer perimeter border.'" (ECF No. 54 at 34-35 (citing '818 Patent, col. 3, ll. 60-64.).)

Upon consideration of the Parties arguments, the Court finds that Broad Ocean's proposed construction is supported by the intrinsic record. *See, e.g.*, '818 Patent, col. 4, ll. 4-20 ("The top piece fits over the bottom piece to enclose the volute and form a casing for the blower....The inner side wall of the primary groove abuts the interior surface of the upstanding wall of the bottom piece and the annular lip of the bottom piece is received in the secondary

groove when the casing is assembled."); col. 6, ll. 55-59 ("The upstanding annular wall 56 of the bottom piece 60 has an upper section 114 that cooperates with the annular grove 92 in the upper portion 74 of the top piece 58.") The Court will therefore adopt Broad Ocean's proposed construction, "the annular wall of the bottom piece of the blower housing fits around the circumference of the blower housing top piece." *See Phillips*, 415 F.3d at 1315.

11. "legs"

Regal Beloit proposes that the term is properly construed as "narrow elongate support," arguing that the definition is corroborated by the plain language of Claim 16, and that to include limitations with respect to a bottom piece would be erroneous, as Claim 16 does not require a bottom piece. (ECF No. 53 at 24-25.)

Broad Ocean proposes that the term is properly construed as "a supporting member integral with the top piece that extends from the top piece to the opposite end of the bottom piece of the blower housing." Broad Ocean argues that "[t]he '818 Patent only and specifically employs the claim term 'legs' in one way—to define the integral 'depending' 'top piece' members that extend from the 'top piece' across the annular wall (56) of the 'bottom piece,' so they can bear 'some of the weight of the blower motor when the blower 50 is installed." (ECF No. 54 at 35-36 (citing '818 Patent, col. 5, ll. 44-55.).) Broad Ocean further argues that during prosecution of the '818 Patent application, the applicant distinguished the alleged invention from a prior art reference by arguing that the alleged invention has "a plurality of legs which in effect 'bridge' across the annular wall [of the bottom piece] to provide additional support for the top piece," to reduce compressive stress on the bottom piece annular wall. *Id.* (citing Def. Ex. 11 at 5-6.)

Upon consideration of the Parties' arguments, the Court finds that Broad Ocean's proposed construction appropriately conforms with the intrinsic record, which describes the legs as integral with the top piece and extending from the top piece to the opposite end of the bottom piece. *See, e.g.*, '818 Patent, col. 5, ll. 42-55. The Court will therefore adopt Broad Ocean's proposed construction, "a supporting member integral with the top piece that extends from the top piece to the opposite end of the bottom piece of the blower housing." *See Phillips*, 415 F.3d at 1314-15; *see also Omega Eng'g*, 334 F.3d at 1323-26 (discussing doctrine of prosecution disclaimer).

12. "legs extending from the top piece peripheral edge across the annular wall"

Regal Beloit argues that the term requires no construction, as the term consists of a long phrase which combines various claim terms separately asserted by Broad Ocean as requiring construction. Regal Beloit further argues that, to the extent the Court deems construction necessary, the Court should refer to the "above constructions." (ECF No. 53 at 25.)

Broad Ocean proposes that the term is properly construed as "legs integral with the top piece which bridge across the entire length of the annular wall of the bottom piece of the blower housing." Broad Ocean argues that their proposed definition derives from the specification and prosecution history of the '818 Patent. (ECF No. 54 at 36-37.)

For reasons similar to those set forth above in connection with "legs," the Court agrees with, and adopts, Broad Ocean's proposed definition, "legs integral with the top piece which bridge across the entire length of the annular wall of the bottom piece of the blower housing." *See Phillips*, 415 F.3d at 1314-15.

13. "to support the top piece in a position on an opposite side of the annular wall from the climate control device surface"

Regal Beloit argues that term requires no construction, and that, to the extent the Court deems construction necessary, the term is properly construed as "to support the top piece in a position on an opposite side of the annular wall from the climate control device surface." (ECF No. 53 at 26.)

Broad Ocean argues that the term is properly construed as "to provide structural support to attach the top piece of the blower housing at the furthest end of the annular wall from the climate control device surface." Broad Ocean argues that the intrinsic record demonstrates that the alleged invention only has one orientation: "the 'bottom piece' (60) seats against a furnace," and "the 'top piece' (58) is seated on top of the 'annular wall' (56), covering the 'bottom piece (60)." Broad Ocean further argues that such construction "is important for a fact finder to understand the location of the 'opposite side of the annular wall' relative to the furnace (climate control device)." (ECF No. 54 at 37-38 (citing '818 Patent, col. 5, ll. 44-55).)

Upon consideration of the intrinsic record and the Parties' arguments, the Court finds that the construction proposed by Broad Ocean derives from the '818 Patent and is the best understanding of the term as it is used therein. The Court will therefore adopt Broad Ocean's proposed construction, "to provide structural support to attach the top piece of the blower housing at the furthest end of the annular wall from the climate control device surface." *See Phillips*, 415 F.3d at 1314-15.

14. "substantially parallel"

Regal Beloit proposes that the term is properly construed as "approximately parallel," arguing that its definition reflects the plain meaning of the term, and that the word

"substantially" is frequently used in patent claims to denote approximation. (ECF No. 53 at 26-27.)

Broad Ocean argues that the term requires no construction, and that Regal Beloit seeks to improperly expand the term, as "substantially" is not synonymous with "approximately." (ECF No. 54 at 38.)

Upon consideration of the Parties' arguments, the Court agrees with Broad Ocean and concludes that the term requires no construction.

15. "adjacent and substantially parallel to the annular wall"

Regal Beloit proposes that the term requires no construction, and that, to the extent the Court deems construction necessary, the term is properly construed as "near and approximately parallel to the annular wall." (ECF No. 53 at 27.)

Broad Ocean proposes that the term is properly construed as "flush and parallel with the volute-shaped bottom piece and close to the annular wall." Broad-Ocean argues that this construction is supported by the intrinsic record, which sets forth that "[t]he purpose of the alleged invention is to maximize the interior space of the 'bottom piece' by, inter alia, employing 'legs' (84) from the 'top piece' (58) and moving the top of the 'fasteners' (40) above the 'top piece' so the 'driving end' (42) d[oes] not require space alongside the 'annular wall' of the 'bottom piece' (60)." (ECF No. 54 at 38-39 (citing '818 Patent, col. 2, ll. 29-32; col. 3, ll. 41-49).)

After careful consideration of the intrinsic record and the arguments made by the Parties, the Court construes the term to mean "flush and substantially parallel with the bottom piece and close to its annular wall." *See Phillips*, 415 F.3d at 1314-15. The Court derives this construction from, and finds that it appropriately comports with, the claim specification. *See, e.g.*, '818

Patent, col. 3, ll. 34-40 ("Thus, by locating the mechanical fastener with its head above the top piece, it may be driven tightly against the lug at the top of the blower and space need not be provided for the head of the mechanical fastener to be driven tightly against a blower housing surface which itself is located within the envelope of the impeller space."), col. 3, ll. 49-53 ("With the present invention, the blower housing sidewall may be immediately adjacent the shaft 44 as the driving end is snugged against a surface located above the blower housing sidewall."), col. 8, ll. 9-14 ("By moving the driving end 42 of the mechanical fastener 40 above the lug 80 on the top piece 58, the clearance between the screw head driving end 42 and the upstanding annular wall 56 of the blower housing 50, as well as any clearance between the shaft and the opening through which it extends can be eliminated.").

16. "each fastener driving end seating against the top piece"

Regal Beloit argues that the term requires no construction, and that, to the extent the Court deems construction necessary, the term is properly construed as "each fastener driving end seating against the top piece." (ECF No. 53 at 28.)

Broad Ocean proposes that the term is properly construed as "the fastener driving end overlaps the annular wall." Broad Ocean argues that the intrinsic record supports this construction, and that, "[a]s described and claimed, if the fastener shaft is flush against the annular wall of the bottom piece, the 'driving end' must extend over and 'overlap' the annular wall." (ECF No. 54 at 39-40.)

After careful consideration of the intrinsic record and the arguments made by the Parties, the Court construes term to mean "each fastener driving end seating against the top piece and partially overlapping the annular wall." *See Phillips*, 415 F.3d at 1314-15. The Court derives this construction from, and finds that it appropriately comports with, the claim specification.

See, e.g., '818 Patent, col. 5, ll. 2-4 ("The driving end 42 of each of the fasteners 40 seats against the top most portion of top piece 58"), col. 8, ll. 9-14 ("By moving the driving end 42 of the mechanical fastener 40 above the lug 80 on the top piece 58, the clearance between the screw head driving end 42 and the upstanding annular wall 56 of the blower housing 50, as well as any clearance between the shaft and the opening through which it extends can be eliminated.").

17. "lug"

Regal Beloit proposes that the term is properly construed as "projecting portion for receiving a fastener." (ECF No. 53 at 28.)

Broad Ocean proposes that the term is properly construed as "a projection from the peripheral edge of the top piece which the driving end of a fastener is seated against." Broad Ocean argues that, because there are two projection portions that receive fasteners (i.e., lug and mounting flange), the term must be construed such that it can be identified. Broad Ocean further argues that "[t]he '818 Patent is absolutely clear that the 'lugs' (80) extend and project from the peripheral edge (78) of the 'top piece' (58)," that the specification makes clear that "[t]he lug on the top piece has a lug hole to receive a mechanical fastener such as a threaded bolt or screw," and that "there can be no legitimate dispute that the driving end of the fastener seats against the 'lugs." (ECF No. 54 at 40 (citing '818 Patent, col. 3, ll. 27-28).)

Upon consideration of the intrinsic record and the Parties' arguments, the Court finds that the construction proposed by Broad Ocean derives from the '818 Patent and is the best understanding of the term as it is used therein. The Court will therefore adopt Broad Ocean's proposed construction, "a projection from the peripheral edge of the top piece which the driving end of a fastener is seated against." *See Phillips*, 415 F.3d at 1314-15.

18. "plurality of the legs extend downwardly from the plurality of lugs"

Regal Beloit argues that the term requires no construction, and that, to the extent the Court deems construction necessary, the term is properly construed as "plurality of legs extend downwardly from the plurality of lugs." Regal Beloit further contends that the term should not be defined in relation to "a blower housing bottom piece," which it maintains is an "unclaimed element." (ECF No. 53 at 29.)

Broad Ocean proposes that the term is properly construed as "structural members integral with the top piece lugs that extend from the top piece towards the bottom piece of the blower housing." Broad-Ocean argues that the construction "provides the proper meaning and clarity for a finder of fact to understand that the integral 'legs' (84) extend from 'top piece' (58) towards the 'bottom piece' (60)," and that "[a] construction providing context of the required direction between the top and bottom pieces is import[ant]." (ECF No. 54 at 40.)

Upon consideration of the intrinsic record and the Parties' arguments, the Court construes the term to mean "supporting members integral with the top piece lugs that extend from the top piece towards the bottom piece of the blower housing." *See Phillips*, 415 F.3d at 1314-15.

C. '476 Patent, Claim 1

Claim 1 of the '476 Patent provides:

1. A releasably locking blower housing assembly, comprising:

a *housing body* having a housing body side wall, wherein portions of said housing body side wall form a *ridge* on a top edge of said housing body side wall and, wherein said *ridge* has a *radially external* wall having an *apex*, *located between the two ends of said radially external wall*, said *apex* extending *radially outwardly* from said *ridge*; and,

a *housing cover* having a housing cover side wall that has portions that *matingly engage* portions of said housing body side wall.

'476 Patent, col. 6, ll. 48-59 (emphasis on disputed terms added).

The Parties dispute construction of the following terms:

19. "A releasably locking blower housing assembly"

Regal Beloit argues that term requires no construction because it occurs only in the preamble and is therefore not limiting. (ECF No. 53 at 29-30.)

Broad Ocean proposes that the term is properly construed as "cover and housing are attachable, detachable and reattachable to one another." Broad Ocean argues that the "releasably locking' limitation in the preamble is necessary to understand the terms in the body of the claim, and recites a required limitation absent from the claim itself," which was used to overcome a prior art. Thus, Broad Ocean contends that the elements and limitations in the preamble are required and limiting. (ECF No. 54 at 44-45.)

Upon consideration of the intrinsic record and the Parties' arguments, the Court agrees with Broad Ocean that the elements and limitations in the preamble are required and limiting. *See Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (in general, preamble limits invention if it recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to claim). As Broad Ocean notes, the specification states that an "object of the present invention is to provide a releasably locking seal," '818 Patent, col. 2, ll. 36-37, and that to accomplish its claimed objective, "a new blower housing construction has been devised wherein the housing, comprising a housing body and housing cover, can be releasably locked," *id.* col. 4, ll. 32-34. The Court therefore finds that the preamble limits the invention, and adopts the construction proposed by Broad Ocean, "cover and housing are attachable, detachable and reattachable to one another."

20. "housing body"

Regal Beloit proposes that the term, along with the later disputed term "housing cover," are properly construed as "the two components that form the blower housing assembly." Regal

Beloit argues that Claim 1 of the '476 Patent requires both a housing body and a housing cover, and that "a person of ordinary skill in the art would have understood that blower housings generally comprise two main parts, either of which could be considered the housing body or the housing cover." (ECF No. 53 at 30.)

Broad Ocean proposes that the term is properly construed as "portion of a blower assembly that the impeller fits within." Broad Ocean argues that the '476 Patent expressly describes and limits the "housing body" to the component that houses the impeller. (ECF No. 54 at 45-46.)

After careful consideration of the Parties' arguments, the Court construes the term to mean "a component of the housing assembly within which the impeller fits." *See Phillips*, 415 F.3d at 1314-15. The Court derives this construction from the intrinsic record. *See, e.g.*, '476 Patent, col. 4, ll. 49-52 ("the housing body 1 can be a variety of shapes to accommodate an impeller unit contained in the housing unit that is used to expel air and gases passing into the blower housing"), col. 4, ll. 54-57 ("Ultimately, the housing body shape is a design consideration that can vary with the impeller used…").

21. "ridge"

Regal Beloit proposes that the term is properly construed as "axially extending projection." Regal Beloit argues that "Claim 1 specifies that the ridge is a portion of the housing body side wall," and that "[b]ecause the ridge is part of the housing body side wall, it does not project from the housing body side wall." (ECF No. 53 at 31.)

Broad Ocean proposes that the term is properly construed as "an axially extending projection from the housing body side wall." Broad Ocean argues that the ridge's extension

from the housing body side wall is expressly required in the claim and specification. (ECF No. 54 at 47.)

Upon consideration of the Parties' arguments, the Court agrees with Broad Ocean's proposed construction. The Court finds that this construction derives from, and appropriately comports with, the intrinsic record. *See, e.g.*, '476 Patent, col. 4, ll. 58-61 ("the side arcuate wall 3 [of the housing body] has an axially extending ridge 5 extending from a top edge 6 of said side arcuate wall 3"). Therefore, the Court will adopt Broad Ocean's proposed construction, "an axially extending projection from the housing body side wall." *See Phillips*, 415 F.3d at 1314-15.

22. "radially external"

Regal Beloit proposes that the term, which modifies the word "wall," is properly construed as "circumferential outer portion." Regal Beloit argues that, "[b]y use of the term 'radially,' the wall is facing outward with respect to the center (e.g., the center of a circle)," and, "[a]s such, the wall must be a circumferential wall." (ECF No. 53 at 31.)

Broad Ocean proposes that the term is properly construed as "facing outward relative to the body of the housing and the ridge." Broad Ocean argues that the intrinsic evidence makes clear that the radially external wall faces outward, away from the impeller and body of the housing. Broad Ocean further argues that, in prosecuting the '476 Patent, the applicants argued: "the ridge extending from the housing body side wall has a radially extending apex which extends radially outwardly relative to the body of the housing and the ridge. The orientation of the apex in a radial direction is crucial to the function of the ridge/housing cover channel locking assembly." (ECF No. 54 at 47-48 (citing, inter alia, Def. Ex. 9. at 6).)

Upon consideration of the Parties' arguments, the Court finds that the intrinsic record supports Broad Ocean's proposed construction. *See, e.g.*, '476 Patent, col. 2, ll. 45-49 ("The housing body has a side wall with a ridge extending axially therefrom. A radially exterior wall of the ridge has an apex...that extends radially outwardly from the ridge.") The Court will therefore adopt Broad-Ocean's proposed construction, "facing outward relative to the body of the housing and the ridge."

23. "apex"

Regal Beloit proposes that the term is properly construed as "region of external wall with largest diameter." Regal Beloit argues that this construction is supported by the claim language and specification, and that "an apex does not need to be an edge and does not need to be formed where two surfaces meet," but instead "may be rounded." Because the apex extends radially outward from the external wall, Regal Beloit contends that the apex "inherently must have a larger diameter than the external wall." (ECF No. 53 at 32.)

Broad Ocean proposes that the term is properly construed as "a tip or edge formed where two surfaces meet." Broad Ocean argues that the '476 Patent consistently uses the term in its ordinary manner to describe its location "at a point, not within a region, for the structure to be releasably locking." (ECF No. 54 at 48-49.)

Upon consideration of the Parties' arguments, the Court agrees with Broad Ocean's proposed construction. The Court finds that this construction derives from, and appropriately comports with, the intrinsic record. *See, e.g.*, '476 Patent, col. 2, ll. 46-49 ("A radially exterior wall of the ridge has an apex either at the midpoint or at some other point between the two ends of the exterior wall that extends radially outwardly from the ridge."), col. 4, ll. 61-64 ("The ridge 5 is essentially rectangular...in shape except that a midpoint of an interior ridge wall 7...of ridge

5 extends radially inwardly to create an apex 8 along the length of interior ridge wall 7."). The Court will therefore adopt Broad Ocean's proposed construction, "a tip or edge formed where two surfaces meet." *See Phillips*, 415 F.3d at 1315.

24. "located between the two ends of said radially external wall"

Regal Beloit argues that the term requires no construction, and that, to the extent the Court deems construction necessary, the term is properly construed as "located between the two ends of said radially external wall." Regal Beloit argues that the Parties have proposed separate constructions for "radially external," and that there exist no legitimate reason to define the remainder of the phrase. (ECF No. 53 at 32-33.)

Broad Ocean proposes that the term is properly construed as "located between the top and the bottom of the radially external wall." Broad Ocean argues that the term needs construction because the word "ends' in the limitation will not provide a fact finder with sufficient guidance." Broad Ocean further argues that the '476 Patent only describes the location of the apex as being between the top and bottom of the radially external wall. (ECF No. 54 at 50.)

Upon consideration of the Parties' arguments, the Court agrees with, and finds that the intrinsic record supports, Broad Ocean's proposed construction. *See, e.g.*, '476 Patent, col. 5, ll. 3-5 ("In practice, apex 8 can be situated at any point between the top and bottom edges of interior ridge wall 7."). The Court will therefore adopt Broad Ocean's proposed construction, "located between the top and bottom of the radially external wall." *See Phillips*, 415 F.3d at 1314-15.

25. "radially outwardly"

Regal Beloit proposes that the term is properly construed as "outward in a radial direction," arguing that, similar to "radially external," the definition conforms to the ordinary meaning of the term as used in Claim 1 and the specification. (ECF No. 53 at 33.)

Broad Ocean proposes that the term is properly construed as "extending away from the axis of the impeller." Broad Ocean argues that the definition is supported by the intrinsic record and prosecution history, and that it provides context and clarity for the location of the apex. (ECF No. 54 at 50-51.)

Upon consideration of the intrinsic record and the Parties' arguments, and for reasons similar to those mentioned above in connection with "radially external," the Court agrees with, and adopts, Broad Ocean's proposed construction, "extending away from the axis of the impeller." *See Phillips*, 415 F.3d at 1314-15.

26. "housing cover"

Regal Beloit proposes that the term, along with the aforementioned "housing body," are properly construed as "the two components that form the blower housing assembly." (ECF No. 53 at 30.) Broad Ocean argues that the term requires no construction. (ECF No. 54 at 45-46.) After careful consideration of the Parties' arguments, and for the reasons set forth above in connection with "housing body," the Court construes the term to mean "a component of the housing assembly." *See Phillips*, 415 F.3d at 13414-15.

27. "matingly engage"

Regal Beloit argues that the term is properly construed as "fitting together," arguing that the phrases "mating' and 'mate' have the ordinary meaning of 'join or fit together," and that the phrase "engage' similarly has an ordinary meaning of 'fits together." (ECF No. 53 at 33-34.)

Broad Ocean proposes that the term is properly construed as "to releasably join parts together." Broad Ocean argues that "[t]he '476 Patent unequivocally teaches that the 'mating engagement' between the 'housing body' and 'cover' requires that it be releasable." Broad Ocean further argues that during the prosecution of the '476 patent, the applicants distinguished a prior art reference by arguing that the claimed invention "'enables the housing cover to be snapped onto the ridge of the housing body,' that the components thereby 'mate,' and 'results in the housing body and housing cover being releasably locked together."" (ECF No. 54 at 51-52 (citing, inter alia, Def. Ex. 9 at 5-7).)

After careful consideration of the intrinsic record and the Parties' arguments, the Court construes the term to mean "to join parts together." *See Phillips*, 415 F.3d at 1314-15. The specification consistently refers to mating engagement as a means of achieving the releasably-locking effect. *See, e.g.*, '476 Patent, col. 2, ll. 62-64 ("The mating surfaces of the housing body and housing cover provide a means to releasably lock the parts together.") Thus, there is a strong implication that the term does not inherently mean "to *releasably* join parts together," and that the inclusion of the word "releasably" in the definition would create redundancy. *See Phillips*, 415 F.3d at 1314-15.

SUMMARY OF ADOPTED CONSTRUCTIONS

1. "Venturi effect" means "the process by which fluid enters into a fluid stream having a lower pressure, the lower pressure in the fluid stream resulting from an increase in the fluid stream velocity."

2. "So as to minimize the venturi effect of air flowing by said aperture responsive to rotation of the impeller in said housing shell" means "structure to increase the pressure, and decrease the velocity, of the fluid, so as to allow fluid to pass through the aperture drain."

3. "*An interior surface*" means "the curved inside surface, having a uniform radius, of the outer wall of the housing shell."

4. "Wherein a portion of said at least one aperture is disposed above the housing shell *interior surface*" means "the aperture must have a portion of the opening extending above, and a portion of the opening extending below, the interior surface of the housing shell."

5. "A dished region" means "a depression below the interior arcuate surface."

6. "*A blower housing top piece*" means "one of the two blower housing parts that covers the bottom piece of the blower housing, and has integral legs that bridge across the annular wall of the bottom piece."

7. "Peripheral edge" means "an outside border of a surface."

8. "*Extends around the top piece*" means "spans the entire circumference of the top piece."

9. "*Blower housing annular wall*" means "circular wall that is parallel to the axis of and envelops the impeller."

10. "Annular wall extending around the peripheral edge of the top piece" means "the annular wall of the bottom piece of the blower housing fits around the circumference of the blower housing top piece."

11. "*Legs*" means "a supporting member integral with the top piece that extends from the top piece to the opposite end of the bottom piece of the blower housing."

12. "*Legs extending from the top piece peripheral edge across the annular wall*" means "legs integral with the top piece which bridge across the entire length of the annular wall of the bottom piece of the blower housing."

13. "To support the top piece in a position on an opposite side of the annular wall from the climate control device surface" means "to provide structural support to attach the top piece of the blower housing at the furthest end of the annular wall from the climate control device surface."

14. "Substantially parallel" requires no construction.

15. "*Adjacent and substantially parallel to the annular wall*" means "flush and substantially parallel with the bottom piece and close to its annular wall."

16. "*Each fastener driving end seating against the top piece*" means "each fastener driving end seating against the top piece and partially overlapping the annular wall."

17. "*Lug*" means "a projection from the peripheral edge of the top piece which the driving end of a fastener is seated against."

18. "*Plurality of the legs extend downwardly from the plurality of lugs*" means "supporting members integral with the top piece lugs that extend from the top piece towards the bottom piece of the blower housing."

19. "*A releasably locking blower housing assembly*" means "cover and housing are attachable, detachable, and reattachable to one another."

20. "*Housing body*" means "a component of the housing assembly within which the impeller fits."

21. "*Ridge*" means "an axially extending projection from the housing body side wall."

22. "*Radially external*" means "facing outward relative to the body of the housing and the ridge."

23. "Apex" means "a tip or edge formed where two surfaces meet."

24. "*Located between the two ends of said radially external wall*" means "located between the top and bottom of the radially external wall."

25. "Radially outwardly" means "extending away from the axis of the impeller."

26. "Housing cover" means "a component of the housing assembly."

27. "Matingly engage" means "to join parts together."

Accordingly,

IT IS HEREBY ORDERED that Plaintiffs' Motion for Claim Construction (ECF No. 53) is **GRANTED in part** and **DENIED in part**.

IT IS FURTHER ORDERED that Defendants' Motion for Claim Construction (ECF No. 54) is **GRANTED in part** and **DENIED in part**.

IT IS FURTHER ORDERED that the disputed terms in U.S. Patent No. 5,620,302, U.S. Patent No. RE40,818, and U.S. Patent No. 5,954,476 will be construed as set forth in this Memorandum and Order.

Dated this 1st day of June, 2017.

/s/ Jean C. Hamilton UNITED STATES DISTRICT JUDGE