

United States District Court,
N.D. Illinois, Eastern Division.

John W. VON HOLDT, Jr. Janice Anderson and Plas-Tool Co,
Plaintiffs.

v.

**A-1 TOOL CORPORATION, Triangle Tool Corporation, Alfonso Arciniegas, Geoffrey Luther, and
Leroy Luther,**
Defendants.

Nov. 20, 2008.

Donald A. Tarkington, Andrew Dylan Campbell, Elizabeth Anne Mayer, Julie Ann Johnston-Ahlen, Lorena B. Driscoll, Novack and Macey, LLP, Chicago, IL, for Plaintiffs.

Kristin Graham Noel, Matthew J. Duchemin, Anthony A. Tomaselli, James R. Cole, Josephine K. Benkers, Quarles & Brady LLP, Madison, WI, Anthony P. Steinike, Charles E. Harper, Jr., Quarles & Brady LLP, Chicago, IL, for Defendants.

REPORT AND RECOMMENDATION

GERALDINE SOAT BROWN, United States Magistrate Judge.

To: Hon. Blanche M. Manning United States District Judge

Plaintiffs John W. Von Holdt, Janice Anderson and Plas-Tool Company ("Plaintiffs") have sued defendants A-1 Tool Corporation, Triangle Tool Corporation, Alfonso Arciniegas, Geoffrey Luther and LeRoy Luther (collectively, "Defendants"), claiming, among other things, that Defendants have infringed Plaintiffs' United States Patent No. 4,512,493 (the '493 patent), which is entitled "Molded Bucket And Lid Having High Stack Strength." (Fourth Am. Compl. para. 52, 56.) [Dkt. 232.] The District Judge referred the case to this court for a hearing under *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), for the construction of certain claims of the '493 patent. [Dkt. 410.] FN1 For the reasons set out herein, this court respectfully recommends that the disputed terms be construed as set out below.FN2

FN1. Because the claim construction may be dispositive of certain claims and defenses, this court submits its interpretation as a Report and Recommendation to the District Judge. *See Goss Intl. Americas, Inc. v. Graphic Mgt. Assoc., Inc.*, 2008 WL 2410426 at (N.D. Ill. June 11, 2008).

FN2. This opinion addresses only the contested claims of the '493 Patent. The court is not required to make any findings about claims that are not contested. *See Vivid Techs., Inc. v. American Sci. & Engr., Inc.*, 200 F.3d 795, 803 (Fed.Cir.1999) (stating that "only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy").

PROCEDURAL BACKGROUND

After the case was referred to this court for a *Markman* hearing, the parties each filed initial claim charts setting out their respective positions on claim construction. (*See* Pls.' Patent Claim Chart [dkt. 413], Defs' Claim Chart [dkt. 415].) Defendants then filed a motion to strike certain parts of Plaintiffs' Claim Chart [dkt. 418], which was granted. [Dkt. 435.] Plaintiffs filed a Supplemental Claim Chart. [Dkt. 437.] The parties also filed briefs in support of their respective claims construction.FN3 The court held a Markman hearing on May 22, 2008, with each party presenting evidence in support of their proposed construction. [Dkt. 462.] FN4 Plaintiffs presented expert testimony by Glenn L. Beall. (Tr.158.) Defendants presented expert testimony by Wayne D. Milestone. (Tr. 166.) Following the hearing, Plaintiffs filed an amended brief to correct an exhibit.

FN3. The parties' briefs on claim construction are cited as "Pls.' Br. at," [dkt. 451], "Defs.' Br. at ---" [dkt. 458], "Pls.' Am. Br. at ---" [dkt. 463]. Plaintiffs' exhibits (which were attached to Pls.' Am. Br.) are cited as "Pls.' Ex.---," and Defendants' exhibits (which were attached to the declaration of paralegal Tina Kincaid [dkt. 416]) are cited as "Defs.' Ex. ---." Mr. Beall's expert reports are Pls.' Exs. C and F. Mr. Milestone's expert reports are Defs.' Exs. 8, 9, and 12.

FN4. The transcript of the proceeding is cited as "Tr. at ---."

LEGAL STANDARD

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed.Cir.2005) (internal quotations and citations omitted). The words of a claim are given their "ordinary and customary meaning." *Id.* (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996)). "[T]he ordinary and customary 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. In other words, the inquiry into the meaning of a claim term begins with "the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art." *Id.*

Significantly, "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* "Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the courts looks to '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.* at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed.Cir.2004)).

One source of information to which courts look is the intrinsic record, which "usually provides the technological and temporal context to enable the court to ascertain the meaning of the claim to one of ordinary skill in the art at the time of the invention." *V-Formation, Inc. v. Benetton Group, SPA*, 401 F.3d 1307, 1310 (Fed.Cir.2005). Intrinsic evidence may include the words of the claims themselves, the

remainder of the specification, and the prosecution history if it is in evidence. Phillips, 415 F.3d at 1314-17. The prosecution history is:

the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent. Like the specification ... [it] provides evidence of how the PTO and the inventor understood the patent.... Yet because the prosecution history represents an ongoing negotiation between the PTO and the applicant ... it often lacks the clarity of the specification and thus is less useful for claim construction purposes.

Id. at 1317.

Although the claims must be construed so as to be consistent with the specification of which they are a part, the court must not import a limitation from the written description. Playtex Prods., Inc. v. Procter & Gamble Co., 400 F.3d 901, 906 (Fed.Cir.2005). It must use the written description for enlightenment and not to read a limitation from the specification. *Id.*

"Extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art" may also be considered. *Id.* at 1314 (citations omitted). Extrinsic evidence consists of "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Id.* at 1317 (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed.Cir.1995)). Extrinsic evidence in the form of an expert opinion is useful if it is not conclusory or unsupported, and if it is not at odds with the rest of the claims and prosecution history. *Id.* at 1318 (quotation omitted). However, extrinsic evidence is "less significant than the intrinsic record in determining 'the legally operative meaning of claim language.'" *Id.* at 1317 (quotations omitted).

DISCUSSION

I. The '493 Patent and disputed claims

The '493 Patent (Pls.' Ex. A) describes a molded bucket. The purpose of the design is to establish "exceptional stacking strength so that even though the bucket is made of plastic material, large, heavy, filled buckets of the design of this invention can be stacked twelve or thirteen high without distortion or collapse of the lowest bucket in the stack." ('493 Patent at Col. 1: 26-32.)

The claims at issue in the lawsuit, Claims 5, 6, and 7, involve the transition area from the bottom to the sidewall of the bucket, and the ribs that are on the bottom of the bucket to provide strength. (Tr. at 7-9.) Those claims are as follows, with the disputed terms in bold:

5. A molded bucket comprising:

A tapered sidewall defining the sides of the bucket and forming an open mouth having an annular projection at said mouth;

an integral bottom coupled to said sidewall at a transitional area;

said transitional area being molded with a **relatively large radiush** and having a thickness approximately equal to the thickness of said bottom;

said radius and thickness preventing stress concentration from weakening the bucket;

wherein said transitional area curves upward longitudinally to said sidewall, an annular sidewall continuously extending around said bottom **in alignment with said sidewall**, said annular wall having a bottom edge forming a lower support surface projecting beyond the bottom surface of said bucket; and

a plurality of ribs arranged around the bucket and extending **between said annular wall and the radial outer portion of said bottom**.

6. The molded bucket according to claim 5 wherein said ribs are arranged in diagonal orientations forming **side-by-side generally V-shaped ribs**.

7. The molded bucket according to claim 5 further including radial ribs.

('493 Patent at Cols. 6: 62-7: 19 (emphasis added).)

Two potential claim construction disputes were resolved during the hearing. First, Plaintiffs had initially contended that the patent also covered molds, as well as buckets. (Pls.' Claim Chart at 2.) [Dkt. 413.] Plaintiffs subsequently agreed that the issue of whether the patent covers molds to make buckets as well as buckets was not an issue of claim construction but rather an issue of applying the claims to a product. (Tr. at 59-60.) Second, the parties initially disputed the meaning of "radial ribs" in Claim 7, but counsel for both parties agreed at the hearing that "radial ribs" means "ribs that go straight from the sidewall to the outer portion of the bottom, as opposed to diagonal ribs." (Tr. at 17.)

A. "Said transitional area being molded with a relatively large radius"

The radius under discussion is the part that forms the transition or interface between the sidewall and the bottom of the bucket. That area is described in the specification as:

an interface [shown as 132 in Figure 5] having a large inside radius to increase the strength of the bottom corner of the bucket as compared to prior art molding techniques where high corner stress points are encountered at sharp corners. The plastic is allowed to flow freely around the corner in the molding process....

('493 Patent at Col. 4: 61-66.)

The parties disagree about the meaning of "a relatively large radius" and, specifically, about whether "a" means a single radius. Plaintiffs assert that "a relatively large radius" should be interpreted to mean "a single transitional area with a single relatively large radius." (Pls.' Suppl. Claim Chart at 2.) Defendants argue that a bucket can meet the limitations of the Claims at issue if it has more than one radius in the transitional area. (Defs.' Br. at 7.) In other words, Defendants argue, the patent simply requires *at least* one radius, but is not limited to one radius.

Defendants observe that, as a general rule, the term "a" or "an" in a patent claim means "one or more," at least in claims containing the transitional phrase "comprising." *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed.Cir.2000) ("a ... continuous ... chamber" means one or more chambers). *See also Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342-43 (Fed.Cir.2008) ("a pre-soaked fabric

roll" not limited to one roll). In contrast, Plaintiffs cite, for example, *Tivo, Inc. v. EchoStar Commun. Corp.*, 516 F.3d 1290, 1303 (Fed.Cir.2008) (holding that "assembles ... components into an MPEG stream" means a single stream), and *Insituform Techs., Inc. v. Cat Contracting, Inc.*, 99 F.3d 1098, 1106 (Fed.Cir.1996) (claim referring to "a cup" and "the cup" means a single cup).

In the *Tivo* case, decided shortly after *Baldwin*, the Federal Circuit acknowledged the rule expressed in *Baldwin*, but also stated, "[T]he question whether 'a' or 'an' is treated as singular or plural depends heavily on the context of its use. The general rule does not apply when the context clearly evidences that the usage is limited to the singular." *Tivo*, 516 F.3d at 1303 (citations omitted).

In the '493 Patent, the transition "comprising" appears in Claim 5 but does not appear in the limitation related to the phrase "a relatively large radius." That fact lends support to Plaintiffs' argument that the rule described in *Baldwin* does not mandate the interpretation of "a" in this context. *See Tivo*, 516 F.3d at 1304.

Plaintiffs point to the use of the term "said," along with the use of the singular term "radius" rather than the phrase "radius or radii," to support a singular meaning. (Pls.' Br. at 8.) Claim 5 describes, in part:

an integral bottom coupled to said sidewall at a transitional area; said transitional area being molded with *a relatively large radius* and having *a thickness* approximately equal to the thickness of said bottom;

said radius and thickness preventing stress concentration from weakening the bucket

('493 Patent at Cols. 6: 67-7: 5 (emphasis added).)

The use of a definite article like "said" to refer back to an indefinite article does not mandate or even implicate a singular meaning. *Baldwin*, 512 F.3d at 1343. The anaphoric word "said" takes the meaning of the antecedent. *Id.* However, the use of "said" may reinforce the singular nature of the relatively large radius when examined within the framework of the claim, the specification, and the expert testimony. *See Abtox Inc. v. Exitron Corp.*, 122 F.3d 1019, 1024 (Fed.Cir.1997), *amended on other grounds*, 131 F.3d 1009 (Fed.Cir.1997) (finding that term "said chamber" reinforced the singular nature of "the chamber").

Although in some instances claim language alone may disclose unambiguously the limits of claim coverage, in this instance, as in *Abtox*, the meaning of the disputed term must be determined by examining its fuller context.

The specification, like Claim 5, discusses the radius in the singular. ('493 Patent at Col. 4: 62.) Further, Figure 5, the embodiment depicting the written description, reflects only one radius at point 132. (*Id.* at Fig. 5.) While the embodiment set out in the patent is not necessarily the only embodiment that would fall within the patent's claim language (*Glaxo Wellcome, Inc. v. Andrx Pharms., Inc.*, 344 F.3d 1226, 1233 (Fed.Cir.2003)), it may assist in clarifying the claim. *See Insituform Techs.*, 99 F.3d at 1106 (noting that the drawings provided with the patent's specifications reinforced the court's interpretation that "a" meant "one" in the patent's language because they showed only a singular vacuum cup).

Claim 5 expresses the purpose of "said transitional area being molded with a relatively large radius," specifically, that "said radius and thickness prevent [] stress concentration from weakening the buckets." ('493 Patent at Col. 7: 1-5.) The specification similarly describes the design as establishing strong stacking strength and avoiding high stress points at sharp corners. ('493 Patent at Col. 3: 56-60.) The specification

further states that, at the transition area with a large radius, "[t]he plastic is allowed to flow freely around the corner in the molding process of bucket ... and also into the annular bottom portion or foot ... in order to prevent corner stress at areas upon which the bucket rests." ('493 Patent at Cols. 4: 65-5: 1)

Plaintiffs argue that the purpose is advanced by their interpretation because the '493 bucket would "lose its distinctive strength if it had more than one radius." (Pls.' Br. at 10.) Mr. Beall, Plaintiffs' expert, opined that Claim 5 requires "one large radius in the transition area between the sidewall and bottom wall." (Pls.' Ex. C at 11.) He stated that the patent provides for a smooth transition from the bottom wall to the side wall, allowing for a more uniform wall thickness at the junction between the wall and the base of the bucket. (Pls.' Ex. C at 9.) That uniformity permits the plastic to cool in a consistent time frame, making for a stronger plastic bucket overall. (*Id.*) He further stated that the design permits the plastic material to flow through the mold such that the molecules line up around the bend of the transition area, creating optimal strength. (*Id.*) He testified that a person skilled in the art would not interpret "a relatively large radius" as having more than one radius. (Tr. at 159-160.) A person skilled in the art would create a single radius, blending the sidewall and bottom walls together. (*Id.* at 160.)

Defendants claim that Figure 5 of the Patent itself shows more than one radius, because "[t]he fact that the transitional area 'curves' specifically contemplates more than one radius in the transitional area." (Defs.' Claims Chart at 3.) Following that logic, at the hearing Defendants argued, and Defendants' expert witness Mr. Milestone testified, that even a smooth curve has an "ever-changing" infinite number of radii. (Tr. at 84, 174.) FN5 However, those conclusions are based on the geometric definition of "radius," that is, the *distance* between the center of the arc to the arc. (Tr. at 169.) Plaintiffs argued, and Mr. Beall testified, that the word "radius" in the context of a plastic molded bucket means the *arc*-the curved surface itself. (Tr. at 18-19, 159.) Mr. Beall has experience in the plastics industry since 1957, while Mr. Milestone's experience is in design but not specifically plastics. (Tr. 158, 174.) FN6 Mr. Milestone admitted that if "radius" has a meaning in the plastics industry different from the geometric meaning, he is not aware of it. (Tr. at 171.)

FN5. Both Defendants' counsel and Mr. Milestone were referring at the hearing to the illustration on the right side of slide 36 of Defendants' power point presentation, which was marked as Defendants' Demonstrative Ex. 1. Those illustrations and slides were not part of Mr. Milestone's expert report. (Tr. at 179.)

FN6. Mr. Beall is the President of Glenn Beall Plastics, Ltd. and has worked in plastics product design and development for more than 40 years. (Pls.' Ex. C at 1.) Mr. Milestone is a Professor Emeritus of Mechanical Engineering at the University of Wisconsin-Madison. (Defs.' Ex. 8 at 1.)

At the hearing, Defendants also argued, and Mr. Milestone opined, that the transition between the sidewall and the bottom could be achieved in a number of "steps," using an interface with a number of curves, resulting in more than one radius, as illustrated by Defendants' Demonstrative Exhibit 1, slides 35 and 36. (Tr. 172.) Mr. Milestone opined that the stress would be no greater and possibly less than the stress in a single curve. (Tr. 168-69.) Mr. Beall, however, disagreed. In his view, more than one radius, such as suggested by Defendants' expert witness Mr. Milestone, would create potential areas for weakness. (*Id.* at 160.)

Defendants' definition of radius-leading to the conclusion that there are infinite radii-and their suggestion of

achieving the transition from the sidewall to the bottom by multiple curves-creating multiple radii-are both at odds with the phrase "a relatively large" as the modifier for "radius." The court accepts Plaintiffs' argument that the claim is intended to describe a single smooth curve to minimize potential stress points, which is supported by the opinion of Mr. Beall who has extensive experience in the plastics industry. The context clearly evidences a usage limited to the singular.

The court agrees with Plaintiffs that, to a person of ordinary skill in the art of plastic bucket molding, the term "a said transitional area being molded with a relatively large radius" would mean a single radius.FN7

FN7. Plaintiffs also argued that "a relatively large radius" should be interpreted as singular to avoid prior art, specifically the "Lietchi patent," as illustrated by Plaintiffs' Demonstrative Ex. 3. (Tr. at 34-38.) Defendants objected to that argument on the ground that the Lietchi patent was not before the patent examiner, and thus is not properly considered part of the prosecution history of the '493 Patent for purposes of construing the claims of that patent. (Tr. at 65.) Plaintiffs did not respond to that argument, and the court has not considered the Lietchi patent in making this decision.

B. "[I]n alignment with said sidewall."

The parties dispute the meaning of "in alignment with" in the phrase "an annular sidewall continuously extending around said bottom *in alignment* with said sidewall." ('493 Patent, Col. 7: 7 -9 (emphasis added).) The annular sidewall is the ring that forms the bottom or foot of the bucket. (Tr. at 101.) "Said sidewall" is the tapered sidewall defining the sides of the bucket.

Defendants argue that the words "in alignment" should be given their "ordinary meaning," which Defendants assert is "generally or substantially in a straight line or parallel lines." (Defs.' Claim Chart at 3, Defs' Br. at 12.) Plaintiffs do not agree that the term can include parallel lines. Plaintiffs construe that portion of the claim to mean that the annular sidewall continuously extends around the bottom *in a straight line* with the tapered sidewall that defines the sides of the bucket. (Pls.' Suppl. Claim Chart at 5.)

Defendants support their interpretation with the definition of "alignment" in Webster's Third New International Dictionary (G. & C. Merriam Co., 1981), which they quote as "1. the act of aligning or state of being aligned." (Defs.' Ex. 8 at 8.) They quote its second definition as "2: to put (two or more parts of a machine or structure, esp. parts that should be parallel or in line with each other) into proper relative position or orientation <the wheels>~." Id. FN8 Defendants also cite the definition of "alignment" set forth in the American Heritage Dictionary of English: "1. Arrangement or position in straight line or in parallel lines." (Defs.' Ex. 8 at App. E.) Mr. Milestone opined that the word "alignment" has those meanings in the '493 Patent. (Defs.' Ex. 8 at 8.)

FN8. In fact, Defendants quote in part from the definition of "alignment" and in part from the definition of "align," combining the provided definitions. "Alignment" is defined in this text as "1. The act of aligning or state of being aligned 2a: a forming in line (as of troops) b: the line thus formed; specif: an arrangement of soldiers in a line or lines ... 4b: the correct positioning of printed characters in horizontal lines and vertical columns...." (Defs.' Ex. 8 at App. E.)

Plaintiffs, in turn, cite the definition of "alignment" from Webster's New Universal Unabridged Dictionary

published in 1983, the year the patent was issued: "1. an aligning or being aligned. 2. arrangement in a straight line. 3. a line or lines formed by aligning...." (Pls.' Suppl. Claim Chart at 5.) Plaintiffs assert that the annular sidewall extends in a straight line down from the wall of the bucket, such that a foot is created at the base of the bucket. (Pls.' Br. at 13.)

The use of dictionaries to assist in determining the ordinary and customary meaning of claim terms has its limitations, as the Federal Circuit explained in *Phillips*, 415 F.3d at 1319-1323. "Dictionaries, by their nature, provide an expansive array of definitions.... Thus, the use of the dictionary may extend patent protection beyond what should properly be afforded by the inventor's patent." *Id.* at 1321-22 (citation omitted).

Properly viewed, the 'ordinary meaning' of a claim term is its meaning to the ordinary artisan after reading the entire patent. Yet heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification.

Id. at 1321.

Here, a reading of the entire patent does not support interpreting "in alignment" to include "parallel." The word "parallel" does not appear in the specification. Although the embodiment set out in the specification does not necessarily confine the claim, it is part of the patent to be used in interpreting the claim. *Id.* at 1323. The embodiment illustrated in Figure 5 of the '493 Patent shows the annular sidewall (134) extending underneath the sidewall of the bucket (112) in a straight line. (The relevant part of Figure 5 is included as Appendix A to this report.) Defendants argue that this embodiment illustrates something other than a straight line because the *internal* surface of the sidewall may be cored out to support another bucket. (Tr. at 101-04.) But in fact the foot is positioned straight under the tapered sidewall and not parallel to it.

As Plaintiffs observe, for the annular sidewall to be "parallel with" the tapered sidewall would require an offset or span of space between the tapered sidewall defining the side of the bucket and the annular sidewall, and there is none in Figure 5. (*See* Pls.' Br. at 13.) Neither the claim nor the specification provides any description of the placement of any parallel foot extending from the bucket sidewall.

To deal with the practical question of how a tapered sidewall would meet a foot that was parallel to it rather than straight under it, Defendants argue that "alignment" means "generally parallel," not necessarily absolutely parallel. (Tr. at 105.) Defendants' expert Mr. Milestone testified based on the usage of car wheels being "aligned" although they are not absolutely parallel. (Defs.' Ex. 14, Dep. of Wayne Milestone at 252.) The issue here, however, is the ordinary and customary meaning of the term "in alignment" as used with respect to molding plastic buckets. The court is not persuaded that a person of ordinary skill in the art of molding plastic buckets would interpret the term "in alignment" in Claim 5 to include "parallel with." Accordingly, the court interprets the phrase "in alignment" in Claim 5 to mean "in a straight line with."

C. "A plurality of ribs ... extending between said annular wall and the radial outer portion of said bottom"

Claim 5 describes a bucket that has "[a] plurality of ribs arranged around the bucket and extending between said annular wall and the radial outer portion of said bottom." ('493 Patent at Col. 7: 12-14.) The parties agree that the "radial outer portion of said bottom," means the area on the bottom of the bucket where the

transitional area first begins to curve upward from the bottom to meet with the sidewall. (Pls.' Br. at 15; Defs.' Br. at 15.) The parties dispute, however, the meaning of "extending between."

Defendants contend that the ribs cannot extend beyond the radial outer portion. (Defs.' Claim Chart at 4.) They argue that their interpretation is the plain meaning of the word "between" and is supported by the intrinsic evidence. (Defs.' Br. at 16.) Plaintiffs contend that the language "extending between" should be interpreted to mean that the ribs "must, at a minimum, extend between the annular side wall and the radial outer portion of the bottom," (Pls.' Suppl. Claim Chart at 6) but that the claim should not be limited so as to exclude ribs that extend beyond the radial outer portion of the bottom. (Pls. Br. at 16.)

The specification does not define the term "between" as having anything other than its ordinary meaning. In construing the term "varies between," the Federal Circuit referred to two ordinary senses of the word "between": "in the space that separates: BETWIXT," and "from one to the other of." *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1579 (Fed.Cir.1996) (citing *Webster's Third New Int'l World Dictionary of the English Language*, 209 (G. & C. Meriam Co., 1976)). Neither of those ordinary senses includes "beyond."

Further, as Defendants observe, Figures 9 and 10 in the specification show ribs stopping at the radial outer portion of the bottom. Although, as discussed above, the embodiment does not limit the claim, Defendants' interpretation is supported by the fact that there is nothing in the specification, including the illustrations, to suggest the patentee intended a broader meaning for "between" than the ordinary meaning, *i.e.*, "the space that separates" the annular wall from the radial outer portion of the bottom, or "from one [the annular wall] to the other [the radial outer portion of the bottom]."

Accordingly, the term "between" means the space that separates the annular wall and the radial outer portion of said bottom, and not beyond.

Plaintiffs also argued that certain of Defendants' buckets having ribs that extend beyond the radial outer portion of the bottom infringe the '493 Patent under the doctrine of equivalents. (Pls.' Suppl. Claim Chart at 6.) That question is not an issue of claim construction, and, accordingly, has not been considered in this opinion. *See Miken Composites, L.L.C. v. Wilson Sporting Goods Co.*, 515 F.3d 1331, 1336 (Fed.Cir.2008) (stating that issue of infringement, whether literal or by the doctrine of equivalents, is a question of fact).

D. "Generally V-shaped ribs"

Claim 6 provides: "The molded bucket according to claim 5 wherein said ribs are arranged in diagonal orientations forming side-by-side generally V-shaped ribs." ('493 Patent at Col. 7: 15-17.) The parties dispute the meaning of "generally V-shaped ribs." Plaintiffs argue that the phrase "generally V-shaped" should be interpreted to mean "two diagonal lines that extend at an angle, but in opposite directions like the 'over-all' features of the letter 'V.' But it is not crucial that the lines come to a point like the letter 'V.'" (Pls.' Suppl. Claim Chart at 7.) Defendants argue that the ribs that form the "V" must meet at a point on the bucket. (Defs.' Br. at 18-19.)

In support of their interpretation that the ribs need not necessarily come to a point, Plaintiffs focus on the term "generally," which they argue means "1. in general; extensively, though not universally; most frequently, but not without exceptions; as men are generally more disposed to censure than to praise. 2. without detail; in the whole taken together...." (Pls.' Br. at 18, quoting *Webster's New Universal Unabr.*

Dictionary, 762 (Deluxe 2d ed., Dorset & Baber, 1983).) Plaintiffs also rely on Figure 9 of the '493 Patent at point 136 to demonstrate that the ribs at the bottom of the bucket depicted in the embodiment do not come together at a point. (Pls.' Br. at 18.) FN9 Defendants point to the part of the specification that describes ribs in the *lid* of the bucket as having a "modified apex" to argue that the ribs at the *bottom* of the bucket that are described in Claim 6 must also have an apex, or point. (Defs.' Br. at 19-20.) Defendants state that "the ribs [in the lid] must and do touch to form an apex at the inside portion of the 'V.' " (Defs.' Br. at 20.)

FN9. The parties agree that the ribs described in Claim 6 (relating to the bottom of the bucket) are the inner ring of ribs on Figure 9. (Tr. at 54.)

The resolution of this issue is found by looking at the language of the claim and the common meaning of "generally." Notably, Claim 1 describing the lid states that "said ribs [are] disposed diagonally to form side-by-side V-shaped ribs." (493 Patent at Col. 6:51-53.) In contrast, Claim 6 states that "said ribs are arranged in diagonal orientations forming side-by-side *generally* V-shaped ribs." (493 Patent at Col. 7: 16-17 (emphasis added).) The addition of the word "generally" must be given significance. *See* Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1310-1311 (Fed.Cir.2003) (stating that words of approximation, such as 'generally' and 'substantially,' are descriptive terms commonly used in patent claims to avoid a strict numerical boundary to the specified parameter) (citations and quotations omitted).

Defendants argue that if the ribs are not required to meet at a point it is unclear how far apart the ribs could be and still be "V-shaped." (Defs.' Br. at 19, 20.) In *Anchor Wall*, the Federal Circuit rejected a similar argument and held that the district court erred in reading "generally" out of the phrase "generally parallel" on the ground that "parallel" is a mathematical concept.

Because the claim language itself expressly ties the adverb 'generally' to the adjective 'parallel,' the ordinary meaning of the phrase 'generally parallel' envisions some amount of deviation from exactly parallel. It is the claim limitation, as a whole, that must be considered in claim construction.

Anchor Wall, 340 F.3d at 1311.

Here, the adverb "generally" is expressly tied to the adjective "V-shaped." Thus, the claim envisions some deviation from a precise "V." The court agrees with Plaintiffs that "generally V-shaped" ribs means two diagonal lines that extend at an angle but in opposite directions like the "over-all" features of the letter "V," but does not require that the lines come to a point like the letter "V."

E. "Side-by-side"

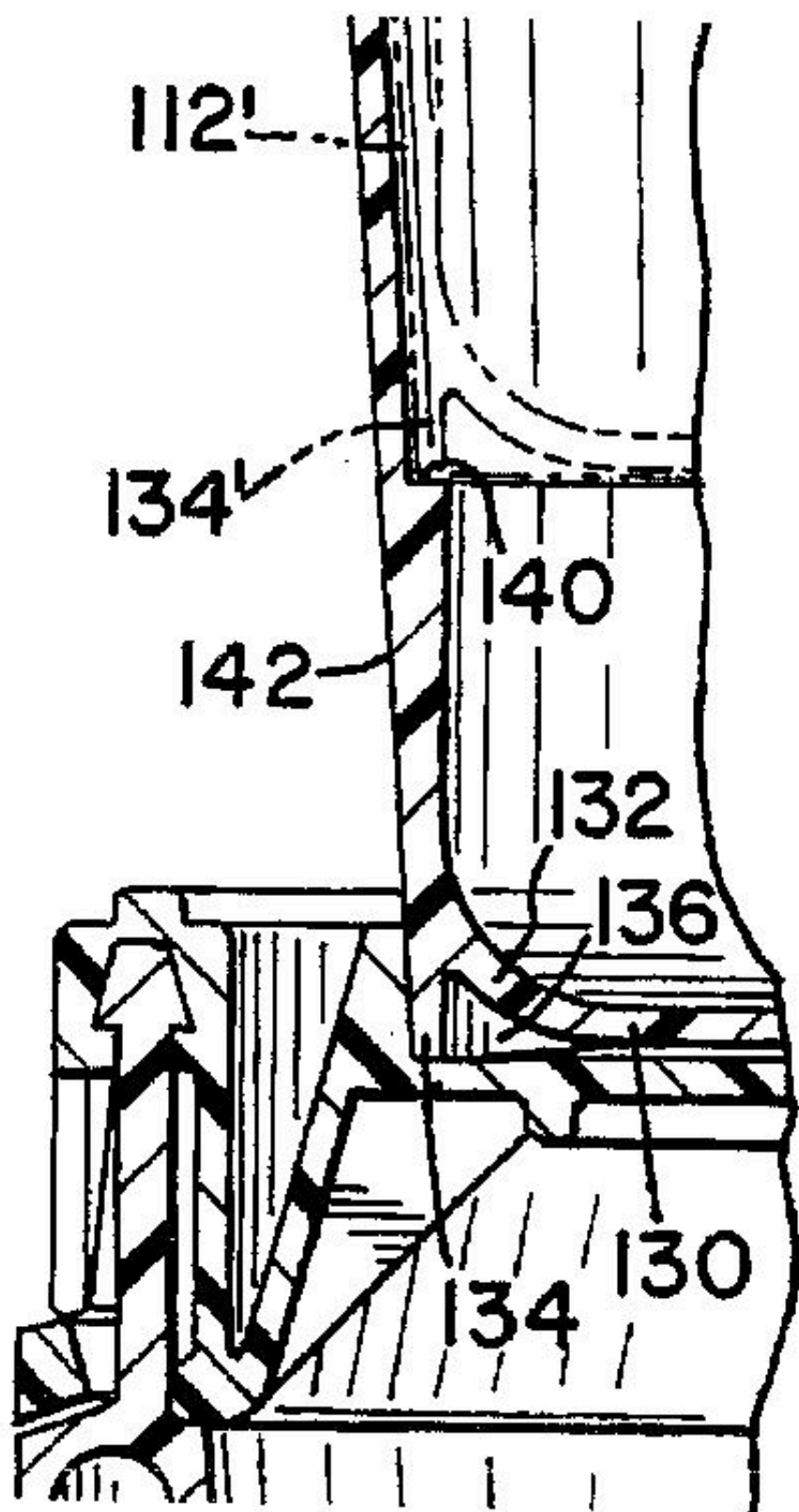
Both parties agree that "side-by-side" means "one beside the other." (Pls.' Suppl. Claim Chart at 7; Defs.' Claim Chart at 4.) Accordingly, there is nothing about this term requiring interpretation as a matter of law, as evidenced by the fact that neither party submitted any briefing on that issue. At the hearing, Plaintiffs argued that the court should determine that buckets having radial ribs between the V-shaped ribs would be covered by that claim. (Tr. 58-59.) However, the issue of whether a particular product infringes on the claim is a question of fact, and not within the scope of the *Markman* hearing. *Miken Composites*, 515 F.3d at 1336.

CONCLUSION

For the foregoing reasons, this court respectfully recommends that the disputed terms of the '493 Patent be determined to have the meanings set out above. Specific written objections to this report and recommendation may be served and filed within 10 business days from the date that this order is served. Fed.R.Civ.P. 72. Failure to file objections with the District Court within the specified time will result in a waiver of the right to appeal all findings, factual and legal, made by this court in the report and recommendation. *Lorentzen v. Anderson Pest Control*, 64 F.3d 327, 330 (7th Cir.1995).

Appendix A

Appendix A



N.D.III.,2008.

Von Holdt v. A-1 Tool Corp.

Produced by Sans Paper, LLC.