

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS

J&M INDUSTRIES, INC.,

Plaintiff,

v.

Case No. 16-2723-JWB

RAVEN INDUSTRIES, INC.,

Defendant.

MEMORANDUM AND ORDER

This matter is before the court for construction of patent claim terms pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). The parties have fully briefed their positions. (Docs. 113, 116, 118.) The court held an evidentiary hearing on the disputed terms on May 29, 2018, and is prepared to rule. The court adopts the construction of the disputed terms set forth herein. Additionally, because the court's construction of these terms renders moot Raven's pending Motion for Summary Judgment (*see* Docs. 129, 130, 135, 136), Raven's motion is hereby DENIED.

I. Background

Plaintiff is the holder of U.S. Patent No. 9,347,239 ("the '239 Patent"), which pertains to a storage system for covering a pile of bulk materials such as grain. (Doc. 1-1.) The Patent discloses an invention for using tarpaulins with an internal strapping system. The parties dispute the meaning of three terms within the Patent's claims: "lower edge," "upper edge," and "fastener" or "plurality of fasteners." These terms appear in several claims of the '239 Patent, including Claims 1 and 9. Claim 1 is representative of the other claims containing these terms and is set forth in full below.

Claim 1

1. A storage system for covering a pile of bulk material, the system comprising:
 - a storage area surface having a storage perimeter defined at a ground surface within which the pile of bulk material is stored substantially on or proximate to the ground surface;
 - a retaining wall extending along the storage perimeter, the retaining wall having a lower edge positioned at the storage perimeter and an upper edge opposite the lower edge, the retaining wall angled away from the storage area;
 - a board securable to at least a portion of the upper edge of the retaining wall, the secured board and at least a portion of the upper edge of the retaining wall having a space there between, the space defining an opening;
 - a plurality of tarpaulins, each tarpaulin including at least one adjacent edge, the plurality of tarpaulins joinable together at the adjacent edges by a plurality of fasteners,
 - at least one perimeter edge, each of the perimeter edges collectively defining a tarpaulin perimeter, a portion of each tarpaulin at or proximate to each perimeter edge positionable over the upper edge of the retaining wall, and
 - a plurality of tunnels, each tarpaulin including at least one tunnel integrally bonded to the tarpaulin;
 - a plurality of straps, each strap provided within and freely movable through one of the tunnels, at least one end of each strap extendable beyond the tarpaulin perimeter and beyond the board over the upper edge of the retaining wall; and
 - a tightening mechanism connected to at least one end of the each of the plurality of straps,wherein at least one of the perimeter edges of the tarpaulins is insertable within or through the opening thereby securing at least one tarpaulin to the upper edge of the retaining wall as the board is secured to the upper edge.

(Doc. 1-1 at 17.)

II. Legal Standards

A patent must describe the exact scope of an invention so that the patentee secures his or her right to “all which he [or she] is entitled” and informs “the public of what is still open to them.” *Capstan AG Systems, Inc. v. Raven Indust., Inc.*, No 16-4132-DDC, 2018 WL 953112, * (D. Kan. Feb. 20, 2018) (quoting *Markman*, 517 U.S. at 373). Toward that end, a patent must have a specification with a written description of the invention, and the manner and process of making and using it, “in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, ... to make and use the same, and shall set forth the best mode contemplated by the inventor ... of carrying out the invention.” 35 U.S.C. § 112(a). The specification must “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor ... regards as the invention.” *Id.* at § 112(b).

“A patent’s claims define the invention.” *Capstan AG Systems*, 2018 WL 953112, *1 (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc)). The claims serve “to forbid not only exact copies of an invention, but [also] products that go to the heart of an invention but avoid[] the literal language of the claim by making a noncritical change.” *Id.* (citing *Markman*, 517 U.S. at 373-74). Infringement in a patent suit requires a finding that a patent claim “covers the alleged infringer’s product or process.” *Markman*, 517 U.S. at 374. Resolution of that issue necessitates a determination of “what the words in the claim mean.” *Id.* (citation omitted). Pursuant to *Markman*, the court must construe the contested terms in a claim before a jury can determine whether accused products infringe on the claim.

“Claim construction begins by considering the language of the claims themselves.” *Capstan AG Systems*, 2018 WL 953112, *2 (citing *Phillips*, 415 F.3d at 1312). “The words of a

claim should be given their ordinary and customary meaning as understood by a person of ordinary skill in the art in question at the time of the invention.” *Sprint Commc’ns Co. L.P. v. Comcast Cable Commc’ns LLC*, No. 11-2684-JWL, 2014 WL 5089402, *1 (D. Kan. Oct. 9, 2014) (citing *Phillips*, 415 F.3d at 1312-13). The claims themselves provide substantial guidance as to the meaning of particular claim terms. The context in which a term is used in the asserted claim and in the patent’s other claims is useful for understanding the ordinary meaning. *Id.*

The claims do not stand alone, but are part of a fully integrated written instrument. They must be read in view of the specification, of which they are a part. *Phillips*, 415 F.3d at 1315. “In fact, the specification is ‘the best guide to the meaning of a disputed term’ and is often dispositive.” *Sprint Commc’ns*, 2014 WL 5089402, *2 (citing *Phillips*, 415 F.3d at 1315.) The specification may contain a special definition of a term given by the patentee – in which case the patentee’s definition controls – or it may reveal an intentional disclaimer or disavowal of claim scope by the inventor, which is regarded as dispositive. *Id.* The “fact that the specification includes limited and specific embodiments,” however, “is insufficient to define a term implicitly, and it is improper to confine the scope of the claims to the embodiments of the specification.” *Id.* (citing *Phillips*, 415 F.3d at 1323.) “The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* The court must be careful not to import limitations from the specification into the claim. In walking this “fine line” between using the specification to interpret claim language and importing limitations from the specification into the claim, the court must focus on how a person of ordinary skill in the art would understand the claim terms. The purposes of the specification include teaching how to make and use the invention and providing a best mode for doing so. It may become clear upon reading the specification in light of those purposes “whether the patentee is setting out

specific examples of the invention ... or intends for the claims and embodiments in the specification to be strictly coextensive.” *Phillips*, 415 F.3d at 1323.

In construing claim terms, the court should also consult the patent’s prosecution history, if it is in evidence. *Id.* at 1317. This history, which consists of the complete record of the proceeding before the Patent and Trademark Office (PTO) and the prior art cited during examination, is considered part of the “intrinsic evidence,” and may provide evidence of how the PTO and the inventor understood the patent. *Id.* But it represents an ongoing negotiation and, as a practical matter, often lacks the clarity of the specification. *Id.*

Finally, the court may consult extrinsic evidence such as expert and inventor testimony, dictionaries, and learned treatises. *Id.* at 1318. But conclusory or unsupported assertions by an expert are not useful, and a court should discount any expert testimony that is clearly at odds with the claim language or other intrinsic evidence. *Id.* Extrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless it is considered in the context of the intrinsic evidence. *Id.* at 1319.

III. Construction of Claim Terms

1 & 2 – “Lower edge” and “upper edge”

The terms “lower edge” and “upper edge” are related and will be discussed together. The terms appear several times in Claims 1 and 9 and are mentioned in two other claims as well. Each usage of the terms is in the context of a retaining wall – i.e., the upper edge or lower edge of a retaining wall – and both parties agree the meaning of the terms does not vary from claim to claim.

Raven contends the term “lower edge” means “the edge of the wall positioned on the ground surface.” J&M contends “lower edge” means “lower portion, but not necessarily the lowermost portion.” *See* Doc. 119-1.

Raven contends the term “upper edge” means “the edge of the wall opposite the lower edge.” J&M contends “upper edge” means “upward portion, but not necessarily the uppermost portion.” Doc. 119-1.

The use of “lower edge” and “upper edge” in the context of the claims and the specification strongly indicates the terms were intended to refer to the surfaces – flat, planar surfaces, to be more precise – comprising the top and bottom of the retaining wall. This meaning is apparent from a combination of statements in the claims and the specification, as discussed below.

Claim 1 of the ‘239 Patent begins by referring to a storage perimeter “defined at a ground surface.” It then refers to a retaining wall along the storage perimeter “having a lower edge positioned at the storage perimeter.” The reasonable and natural inference from this equivalence¹ is that the lower edge of the retaining wall is positioned at the ground surface. This fact suggests that the “lower edge” likely refers to the planar surface comprising the bottom of the wall, as opposed to some portion of the near-vertical surfaces of the wall.² J&M never adequately addresses this fact in arguing that the “lower edge” of the wall does not necessarily refer to the lowermost portion.

A retaining wall as described in the ‘239 Patent, from the perspective of an observer outside the wall, would typically have four distinct or exposed planar surfaces: (1) the outer (or front) surface of the wall facing the observer; (2) the inner (or back) surface of the wall facing away from the observer; (3) the upper (or top) surface of the wall facing skyward; and (4) the lower (or bottom) surface of the wall facing the ground. The “lower edge” positioned at the storage

¹ The mathematical “transitive property of equality” postulates that: if $a=b$, and $b=c$, then $a=c$. The same type of reasoning applies here. If the storage perimeter is defined at a ground surface, and the lower edge is positioned at the storage perimeter, then the lower edge is positioned at the ground surface.

² These surfaces, described as the “front” and “back” surfaces of the wall in the succeeding paragraph, are not precisely vertical because the claim language specifies that the retaining wall is angled away from the storage area. Thus, for ease of reference, the court describes them as near-vertical.

perimeter, which in turn is at the ground surface, indicates a reference to the fourth surface described above.

This understanding is reinforced by additional claim language. Claims 1 and 9 define an “upper edge opposite the lower edge.” To be “opposite” the lower edge - which is at the ground surface – means the “upper edge” refers to the top surface of the retaining wall, not to some undefined portion of the front surface of the wall. It further shows that “lower” and “upper” are used to make clear which of these two edges is being discussed, not to describe a portion of the near-vertical surfaces near the top or bottom of the wall. Further support for this construction comes from the claim language describing “a board securable to at least a portion of the upper edge.” This indicates the upper edge is a discrete area of the wall. The fact that a board must be securable to “at least” a portion of that area suggests the board could be, but does not have to be, securable to the entire upper edge. Such a limitation would make little sense if the upper edge included an undefined portion of the near-vertical wall surface. Additional claim language requiring a tarpaulin “positionable over the upper edge” of the retaining wall, which thereby secures a tarpaulin “to the upper edge of the retaining wall as the board is secured to the upper edge,” and a strap that is extendable “beyond the board” all tend, to one degree or another, to further indicate that the planar surface on top is the “upper edge” of the retaining wall. *Cf. Channell Commercial Corp. v. Pencil Plastics, Inc.*, No. EDCV 14-00474 TJH-SP, 2015 WL 12731926, at *13–14 (C.D. Cal. Aug. 28, 2015) (“the Special Master finds that this combination of recitations would lead a [person of ordinary skill in the art] to understand that, as used in the patent, ‘an upper edge’ is a surface.”)

Both parties cite the following illustration (Fig. 9) and description from the ‘239 Patent specification to support their position:

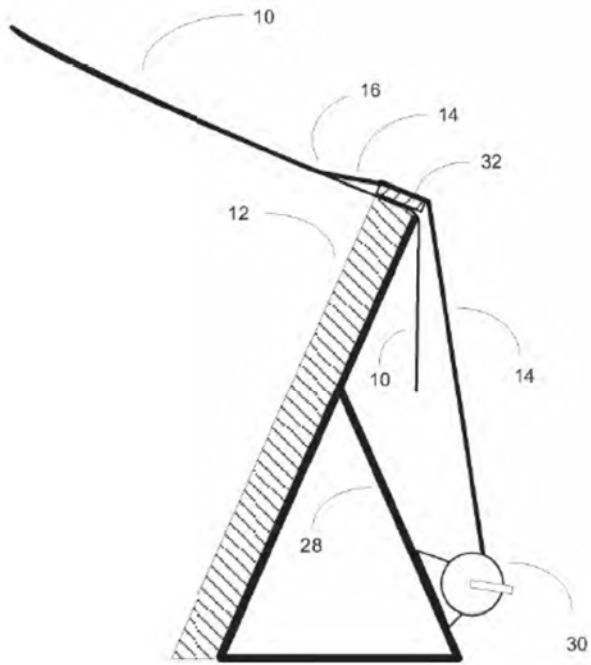


Fig. 9

FIG. 9 depicts the retaining wall 12 (in cross section) and demonstrates how the tarpaulin 10 and strap 14 may be anchored to angle iron brace 28 which is situated adjacent to retaining wall 12. In this embodiment, board 32 runs lengthwise along the top of the retaining wall 12. Just before the tarpaulin reaches the board 32 the strap 14 leaves the tarpaulin through a hole in the pocket 16 and passes over the board 32. The tarpaulin 10 extends between the top of the retaining wall 12 and the board 32, and is pressed between the retaining wall 12 and board 32 when the board is tightened against the retaining wall with screws, clamps, or some other suitable tightening mechanism. Strap 14 runs over the board and terminates at a winch 30, ratchet, or other suitable device that may be used to tension the strap. As depicted in FIG. 9, angle iron brace 28 further supports winch 30. In this embodiment, the winch 30 and supporting angle iron brace 28 are the anchors which tighten and secure tarpaulin 10.

(Doc. 1-1 at 11. 16.)

Raven argues the illustration and references to the board running lengthwise “along the top of the retaining wall” confirm that the upper edge of the wall means the top edge. (Doc. 113 at 13.) J&M argues the same reference shows that “upper” has a different meaning than “top,” because different terms are presumed to have different meanings, and furthermore, it argues, the court should not read a limitation of a preferred embodiment into the patent claims. (Doc. 116 at 13.) Raven has the better of the argument here. For reasons indicated previously, the claim language indicates the two terms have synonymous, not different, meanings. Figure 9 depicts and describes what a person of ordinary skill in the art would understand the “upper edge of the retaining wall” to be given the ordinary and customary meaning of those terms. That understanding is not created by the specification but is confirmed by it, as it shows and describes a board attached to a portion of the top surface of the retaining wall, and it nowhere suggests “upper edge” was intended to mean something other than the top surface of the wall.

J&M argues the prosecution history of the ‘239 Patent shows that “upper edge” is different than “top edge,” because J&M amended Claim 5 to remove the term “top” and insert the term “upper” in describing an area of the wall. (Doc. 116 at 13.) But J&M fails to show that this change was made for any reason other than stylistic consistency. J&M used the terms “upper edge” and “lower edge” in its other claims, and the amendment to Claim 5 made the claim language consistent throughout. (Doc. 113-2 at 148-154.) J&M cites nothing to indicate this change was intended to be substantive. Moreover, the prosecution history shows that the examiner rejected Claim 5 as obvious in light of two prior patents, Kinley³ and Wolstenholme.⁴ The examiner noted Kinley “teaches a storage area cover with retaining wall having a top and bottom edge but does not teach the retaining wall tilts outwardly,” while Wolstenholme teaches a retaining wall “that has a top

³ U.S. Patent No. 8,277,156 (filed Mar. 2, 2010).

⁴ U.S. Patent No. 4,493,248 (filed Oct. 17, 1983).

and bottom edge, the retaining wall tilting outwardly such that the perimeter of the top edge of the retaining wall ... is larger than the perimeter of the bottom edge of the retaining wall.” (*Id.* at 170.) The examiner found it would have been obvious to one of ordinary skill in the art to tilt the retaining wall outward in order to fill the storage system. (*Id.*) In response, J&M successfully distinguished Kinley by asserting that, while it teaches a vertical wall structure containing the load, it “does not disclose a ‘board’ or other distinct structure *on top of the vertical wall structure....*” (Doc. 113-2 at 156) (emphasis added); *see also* Doc. 113-2 at 110 (in response to examiner’s statement that specification discloses that a board is “pressed against the top edge of the retained wall to secure the tarpaulin there by creating *the opening* showed in Figure 9,” but it does not provide for a “wall slit,” J&M amended Claim 1 to delete its reference to a “wall slit” and recite that “the secured board and the at [sic] least a portion of the upper edge of the retaining wall having a space therebetween, the space defining *an opening.*”) This history indicates that both J&M and the examiner considered “upper edge” to mean or be synonymous with “top edge.”

J&M’s proposed constructions of “lower edge” and “upper edge” are inconsistent with the intrinsic evidence cited above. A “lower edge” that is “not the lowermost portion” of a retaining wall is inconsistent with claim language requiring the lower edge to be positioned at the ground surface. An “upper edge” that is not necessarily the uppermost part of the wall is not “opposite” the lower edge. And a tarpaulin “positionable over the upper edge” of the retaining wall is consistent with placement over the top edge of the wall but not placement around an undefined part of the front surface of the wall.

The intrinsic evidence here is sufficient to clearly show the meaning of “upper edge” and “lower edge.” Accordingly, the court need not resort to the extrinsic evidence cited by J&M in support of its construction. *See Vitronics Corp.*, 90 F.3d at 1583 (“In most situations, an analysis

of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence.”). At any rate, the testimony of J&M’s witnesses and other extrinsic evidence lend no material support for J&M’s construction of these claims. Dr. Hellevang basically offered his view of how a grain storage system should be configured to work effectively, but he offered no probative evidence showing the proper construction of the terms “upper edge” and “lower edge” from the ‘239 Patent. Mr. Gummer similarly provided no probative evidence on how a person of ordinary skill in the art would construe these terms.

Finally, the court has considered case law cited by the parties, including *Johnson Safety, Inc. v. Voxx Int’l Corp.*, No. 14-cv-2591-ODW, 2016 WL 6781115 (C.D. Cal. Nov. 16, 2016), but concludes it does not warrant the construction of “upper edge” (or “lower edge”) suggested by J&M. The *Voxx* case addressed claim language disclosing a video monitor with a housing comprising “a first hinge portion adjacent to an upper edge thereof...” (*Id.* at *3.) The video monitor and housing attached to a vehicle seat, with two hinges that were “located near an upper edge of the screen structure and housing.” (*Id.*) Similar to J&M, the plaintiff in *Voxx* urged a construction of “upper edge” meaning “upward edge,” rather than defendant *Voxx*’s suggestion of “the highest surface of an object, the top,” such that the dispute “boils down to ... whether the term is definite and superlative (‘the highest’) or indefinite and comparative (‘an upper’).” (*Id.*) The *Voxx* court adopted the latter construction for two reasons. First, because the claim language used the word “an” [as in “an upper edge”], it suggested that the hinge could be located on one of multiple upper edges of the housing. (*Id.* at *4.) Second, an illustration in the specification used “upper edge” to refer to a surface that clearly was not the highest part of the housing, with an arrow pointing “to an edge within the housing that is near the top, but not the highest surface.” (*Id.*) *Voxx*

is thus distinguishable for several reasons, including the fact that the specification in *Voxx* plainly contradicted the “highest surface” claim construction suggested by the plaintiff. Moreover, the context of “upper edge” here is entirely distinct, both because it refers to a retaining wall, rather than a video monitor housing containing multiple upper edges, and because “upper edge” is defined here as “opposite” the lower edge positioned at the ground surface.

For the reasons indicated above, the court concludes that Raven’s construction of these terms is consistent with the claim language and that J&M’s construction is not. Accordingly, the court determines that “lower edge” means “the edge of the wall positioned on the ground surface.” The term “upper edge” means “the edge of the wall opposite the lower edge.”

3 - “Fasteners” and “Plurality of Fasteners”

Claim 1 discloses a plurality of tarpaulins that are “joinable together at the adjacent edges by a plurality of fasteners.” (Doc. 1-1 at 17; Col. 7:62-65.) Claim 9 contains essentially identical language.

Raven contends the term “fasteners” means “devices that hold adjacent ends of the tarpaulins together.” J&M contends “fasteners” means “anything used to join objects together, including, but not limited to, a stitch, zip-tie, clip, wire, lace, hook and loop fastener, or bolt.” (Doc. 119-1.)

As a practical matter, the parties’ dispute appears to turn on whether stitching or sewing tarpaulins together falls within the meaning of joining “by a plurality of fasteners.” (Doc. 113 at 21.)

The specification of the ‘239 Patent discusses fasteners in two paragraphs. The first of these provides as follows:

The tarpaulin sections may be configured for simple attachment to one another using plastic tie-

wraps or similar closing mechanism[s] passed through grommets in the tarpaulin. Alternatively, sections may be attached using clips, wires, laces, hook and loop fasteners, bolts, or any other equivalent fastening mechanism. A rain flap may extend over the seam between two sections, and the flap may be secured using snaps or a hook and loop or other suitable fastener.

(Doc. 1-1 at 15; Col. 4:8-16.) Another paragraph describes an embodiment with no retaining wall, in which a ground covering is laid on the ground, particulate material is piled on top of it, and the perimeter of a tarpaulin is then

secured to the perimeter of the ground covering using a hook and loop fastener, or by sewing the perimeters together, or by using any other equivalent structure for securing the perimeter of the tarpaulin to the perimeter of the ground covering.

(Doc. 1-1 at 17; Col. 7:36-40.)

J&M contends a person of ordinary skill in the art would construe the term “fastener” to mean anything capable of joining objects together, including a stitch. But the term “fastener” does not typically refer to *anything capable* of joining objects; it is a noun that ordinarily refers to a mechanical device designed to fasten objects together. *Cf. Kolcraft Enter., Inc. v. Artsana USA, Inc.*, No. 13-C-4863, 2017 WL 5418756, *5 (N.D. Ill. Nov. 14, 2017) (“A fastener can be many things, but the term conveys a variety of physical structures.”) A dictionary definition of the term is:

one that fastens: as **a**: a device (as a button, hook and eye, zipper, or snap) that joins together separate parts or closes an opening (as on a garment) **b**: a device for holding shut or preventing opening ... **c**: a worker who fastens together ... parts in the construction of ships.

Webster’s Third New International Dictionary 827 (1986).

As the dictionary definition shows, “fastener” is ordinarily used to refer to a device or mechanism for joining separate parts (in this case tarpaulins) together. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1322 (Fed. Cir. 2005) (“Dictionaries or comparable sources are often useful to assist in understanding the commonly understood meaning of words and have been used by both [the Federal Circuit] and the Supreme Court in claim interpretation.”). The specification of the ‘239 Patent identifies several such devices: plastic tie-wraps “or similar closing mechanisms” passed through grommets; clips; wires; laces; hook and loop fasteners; bolts; or “any other equivalent fastening mechanism.” J&M contends a stitch or stitching is an “equivalent fastening mechanism,” in part because sewing tarpaulins together has been a common practice in the temporary grain storage industry. But given that history, the use of the term “fasteners” indicates that a more restrictive limitation for joining tarpaulins was intended, and the absence of “a stitch, “stitches,” or “stitching” from the “fasteners” identified in the claims and specification appears conspicuous. For example, elsewhere in the specification J&M expressly mentioned stitching or sewing as a means for bonding, securing, or attaching items: pockets may be thermally bonded to the tarpaulins or “any other suitable method such as stitching or adhesive may be used to bond the pockets to the tarpaulin” (Col. 6:3-6); a rain flap may be “attached to the tarpaulin by stitching . . . , or preferably by heat bonding” (Co. 7:4-5) ; and the perimeter of the tarpaulin can be “secured” to a ground covering by “using a hook and loop fastener, or by sewing the perimeters together, or by using any other equivalent structure for securing the perimeter” (Col. 7:36-40.)

The court finds four factors weigh in favor of construing “fasteners” to mean a device other than a stitch or stitches. First, the ordinary meaning of “fastener” so indicates. The term ordinarily signifies a discrete device or mechanism for holding objects together. *Infinity Headwear & Apparel, LLC v. Jay Franco & Sons, Inc.*, No. 15-CV-1259 (JPO), 2016 WL 5372843, at *13–14

(S.D.N.Y. Sept. 26, 2016) (“The Court construes the term ‘fastener’ to mean “a device for connecting or joining the ends of two members together.”). A stitch might be considered the means by which objects are fastened, but would not itself ordinarily be referred to as a “fastener.” Nor would a series of stitches customarily be considered a “plurality of fasteners.” *See August Tech. Corp. v. Camtek, Ltd.*, 655 F.3d 1278, 1286 (Fed. Cir. 2011) (“plurality” means more than one, so a “plurality of wafers means more than one physically distinct wafer.”). Second, the historical practice of sewing tarpaulins together suggests that “stitches” was purposely excluded from the claim of tarpaulins joined by a “plurality of fasteners,” both because of the ordinary meaning of “fasteners” and because of the itemization of various fastening devices other than stitches. Third, a series of stitches is not an “equivalent fastening mechanism” to plastic tie-wraps, clips, wires, laces, hook and loop fasteners, or bolts. As Raven points out, these other mechanisms all consist of devices that more or less allow temporary joiner, whereas sewing adjacent tarpaulins together would produce a semi-permanent bond, like gluing or heat bonding, that could not be easily undone. Finally, the specification contains the following illustration and description:

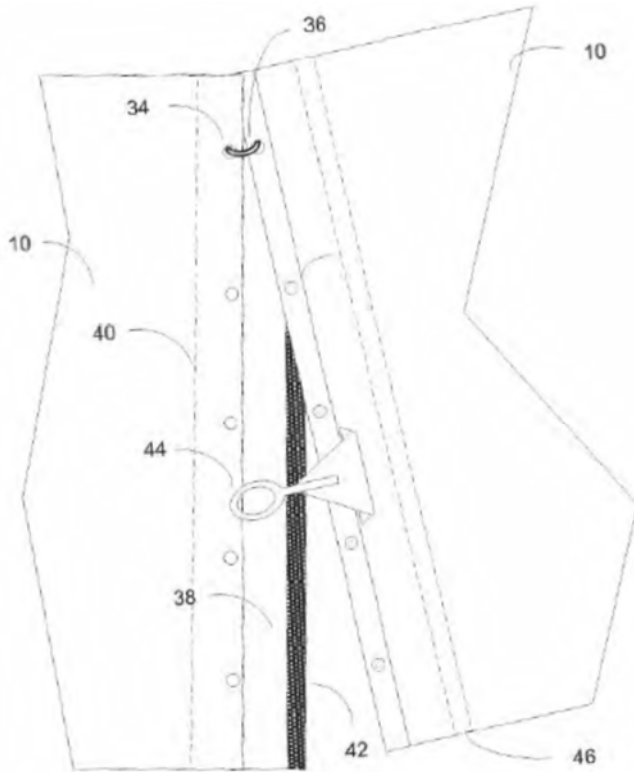


Fig. 10

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FIG. 10 depicts a seam between two tarpaulin sections 10, and also shows an integral handle 44 for closing the two sections. A rain flap 38 is used to keep water out of the storage area. The rain flap 38 may be attached to the tarpaulin by stitching 40, or preferably by heat bonding. A hook and loop fastener 42, 46 may be used to seal the rain flap against becoming unsecured by wind or the elements. Where the respective edges of two adjacent sections meet, opposing grommets 34 are used to hold the sections together and are tied with a plastic tie wrap 36, a cord, cable, chain, carabiner or any other suitable closing mechanism.

Figure 10 explains that adjacent sections of tarpaulins may be held together and tied by various closing mechanisms. Like the claim language, it does not mention stitches in the list of mechanisms. Moreover, it specifies that the rain flap “may be attached by stitching” or, preferably, by heat bonding. Consistent with the remainder of the ‘239 Patent, then, stitches and stitching are conspicuously absent from the illustrative list of “fasteners” for tarpaulins, but are specifically called out when sewing or stitching some other part of the invention is contemplated. *Kolcraft Enterprises, Inc. v. Chicco USA, Inc.*, No. 09 C 03339, 2018 WL 1784130, at *3 (N.D. Ill. Apr. 13, 2018) (“the specification gives examples of fasteners—Velcro strips and rivets—confirming that the claim term ‘fastener’ is referring to this category of known structures.”) Taken together, this factor, like the above factors, weighs in favor of Raven’s construction of “fasteners” (or “plurality of fasteners”) and against J&M’s construction.

In sum, for the reasons discussed above, the court adopts Raven’s proposed construction that the term “fasteners” in the ‘239 Patent means “devices that hold the adjacent ends of the tarpaulins together.”

IV. Motion for Summary Judgment (Doc. 129.)

Raven filed a motion for summary judgment arguing that if the court were to adopt J&M’s proposed constructions of “upper edge” and “lower edge,” the ‘239 Patent would be invalid for indefiniteness. (Doc. 130 at 1.) Because the court has rejected J&M’s proposed construction of these terms, the motion for summary judgment will be denied as moot.

V. Conclusion

The court adopts the construction of “lower edge,” “upper edge,” and “fastener” or “plurality of fasteners” set forth in this order. Additionally, Raven’s Motion for Summary Judgment (Doc. 129) is DENIED as moot.

IT IS SO ORDERED this 21st day of June, 2018.

s/ John W. Broomes
JOHN W. BROOMES
UNITED STATES DISTRICT JUDGE