

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

**TINNUS ENTERPRISES, LLC, and
ZURU LTD.**

Plaintiffs,

v.

TELEBRANDS CORP., et al.,

Defendants.

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No. 6:15-cv-00551 RWS-JDL

JURY DEMANDED

MEMORANDUM OPINION AND ORDER

This claim construction opinion construes the disputed claim terms in U.S. Patent No. 9,051,066 (“the ’066 Patent”). Plaintiffs Tinnus Enterprises, LLC, and ZURU Ltd. (“Plaintiffs”) allege that Defendants Telebrands Corp. and Bed Bath & Beyond, Inc. (“Defendants”) infringe certain claims of the ’066 Patent. Plaintiffs filed an opening claim construction brief (Doc. No. 162), to which Defendants filed a responsive brief (Doc. No. 172), to which Plaintiffs filed a reply (Doc. No. 175). The parties additionally submitted a Joint Claim Construction Chart pursuant to P.R. 4-5(d). (Doc. No. 178.) On April 21, 2016, the Court held a claim construction hearing. Upon consideration of the parties’ arguments, and for the reasons stated herein, the Court adopts the constructions set forth below.

OVERVIEW OF THE PATENTS

Plaintiffs contend that Defendants’ Balloon Bonanza and Battle Balloons products literally infringe claims 1, 3-4, 7-9, and 14 of the ’066 Patent. The ’066 Patent is the only patent in suit, and is entitled “System and Method for Filling Containers with Fluids.” ’066 Patent. The disclosure of the ’066 Patent relates generally to fluid inflatable systems and more particularly, to a system and method for filling containers with fluids. ’066 Patent at 1:19-21.

The stated objective of the invention is to fill more than one container, such as balloons, simultaneously to save time and avoid potential damage to the containers. '066 Patent at 1:26-

41. The '066 Patent contains one independent claim, claim 1, which recites:

1. An apparatus comprising:
a housing comprising an opening at a first end, and a plurality of holes extending through a common face of the housing at a second end;
a plurality of flexible hollow tubes, each hollow tube attached to the housing at a respective one of the holes at the second end of the housing;
a plurality of containers, each container removably attached to a respective one of the hollow tubes; and
a plurality of elastic fasteners, each elastic fastener clamping a respective one of the plurality of containers to a corresponding hollow tube, and each elastic fastener configured to provide a connecting force that is not less than a weight of one of the containers when substantially filled with water, and to automatically seal its respective one of the plurality of containers upon detaching the container from its corresponding hollow tube, such that shaking the hollow tubes in a state in which the containers are substantially filled with water overcomes the connecting force and causes the containers to detach from the hollow tubes thereby causing the elastic fasteners to automatically seal the containers,
wherein the apparatus is configured to fill the containers substantially simultaneously with a fluid.

CLAIM CONSTRUCTION PRINCIPLES

“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) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313-1314; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification and the prosecution history. *Phillips*, 415 F.3d at

1312-13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312-13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003). Claim language guides the Court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Other claims, asserted and unasserted, can provide additional instruction because "terms are normally used consistently throughout the patent." *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). "[T]he 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 Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of

the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. For example, “[a] claim interpretation that excludes a preferred embodiment from the scope of the claim ‘is rarely, if ever, correct.’” *Globetrotter Software, Inc. v. Elam Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent.”). The well-established doctrine of prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002); *see also Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994 (Fed. Cir. 2003) (“The disclaimer . . . must be effected with ‘reasonable clarity and deliberateness.’”) (citations omitted). “Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378-79 (Fed. Cir. 1988) (quotation omitted). “As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Omega Eng’g, Inc.*, 334 F.3d at 1324.

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” the Court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

In patent construction, “subsidiary fact finding is sometimes necessary” and the court “may have to make ‘credibility judgments’ about witnesses.” *Teva v. Sandoz*, 135 S.Ct. 831, 838 (2015). In some cases, “the district court will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Id.* at 841. “If a district court resolves a dispute between experts and makes a factual finding that, in general, a certain term of art had a particular meaning to a person of ordinary skill in the art at the time of the invention, the district court must then conduct a legal analysis: whether a skilled artisan would ascribe that same meaning to that term *in the context of the specific patent claim under review.*” *Id.* (emphasis in original). When the court makes subsidiary factual findings about the extrinsic evidence in consideration of the “evidentiary underpinnings” of claim construction, those findings are reviewed for clear error on appeal. *Id.*

DISCUSSION

The parties dispute the meaning of the following claim terms, which are set forth herein:

I. “common face” (Claim 1)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“common face” (Claim 1)	No construction is needed; the ordinary meaning of claim language as understood by a person of skill in the art is readily apparent. If the Court believes that a construction is necessary, it should be: “a shared outer surface of the housing”	“a single, planar portion of an object bounded by an edge”

Plaintiffs cite to the specification to argue that the “common face” need not be planar: “[v]arious other shapes may be used herein without changing the scope of the present disclosure. For example, housing may be conical, cylindrical, pyramidal, etc., without departing from the broad scope of the embodiments.” ’066 Patent at 6:11-16. Plaintiffs further contend that both experts agree that ordinarily a “face” need not be planar. (Doc. No. 162, at 3 (citing Kudrowitz Decl. at ¶ [008-011]; Hearing Transcript, p. 120, ll. 15-20 (“But if I just looked at the box and I was walking down the street, I would still think six faces.”).) Plaintiffs contend that “common face” “conveys the concept of a shared outer surface but also includes the idea that the tubes are extending out of the housing in the same general direction.” *Id.* Plaintiffs further argue that Defendants’ only support for their construction comes from false assumptions in the prosecution history that (1) “common face” must be a subset of “two-dimensional array;” (2) the examiner and patent owner must have intended “common face” to directly replace “two-dimensional array” as a narrower expression of the scope conveyed by a two-dimensional array; and (3)

“common face” is the only limitation added to the claims to overcome Boise. (Doc. No. 162, at 4.)

Defendants argue that the prosecution history of the '066 Patent “confirms that a ‘common face’ cannot mean ‘a shared outer surface’” because if “‘common face’ is not planar, then contrary to the Examiner’s Statement of Reasons for Allowance, independent claim 1 of the '066 Patent is not distinguishable over the Boise prior art.” (Doc. No. 172, at 7-8.) Defendants further take issue with Plaintiffs’ expert’s opinions regarding “common face” because he relied on Merriam Webster’s dictionary, which defines “face” as “any of the plane surfaces that bound a geometric solid.” (Doc. No. 172, at 8.)

The parties’ primary dispute regarding the term “common face” involves the Examiner’s remarks during prosecution. During prosecution, the Examiner amended claim 1 as follows: “a housing comprising an opening at a first end, and a plurality of holes extending through a common face of the housing ~~two-dimensional array of holes~~ at a second end.” (Doc. No. 162-13, Prosecution History App. No. 14/492,487, at 2.) The Examiner further stated in relevant part, “[t]he ‘common face’ language of claim 1 distinguishes the present invention for Boise, in particular figures 4 and 5 of that reference.” *Id.* at 3. Figure 5 of Boise is representative, and is set forth below:

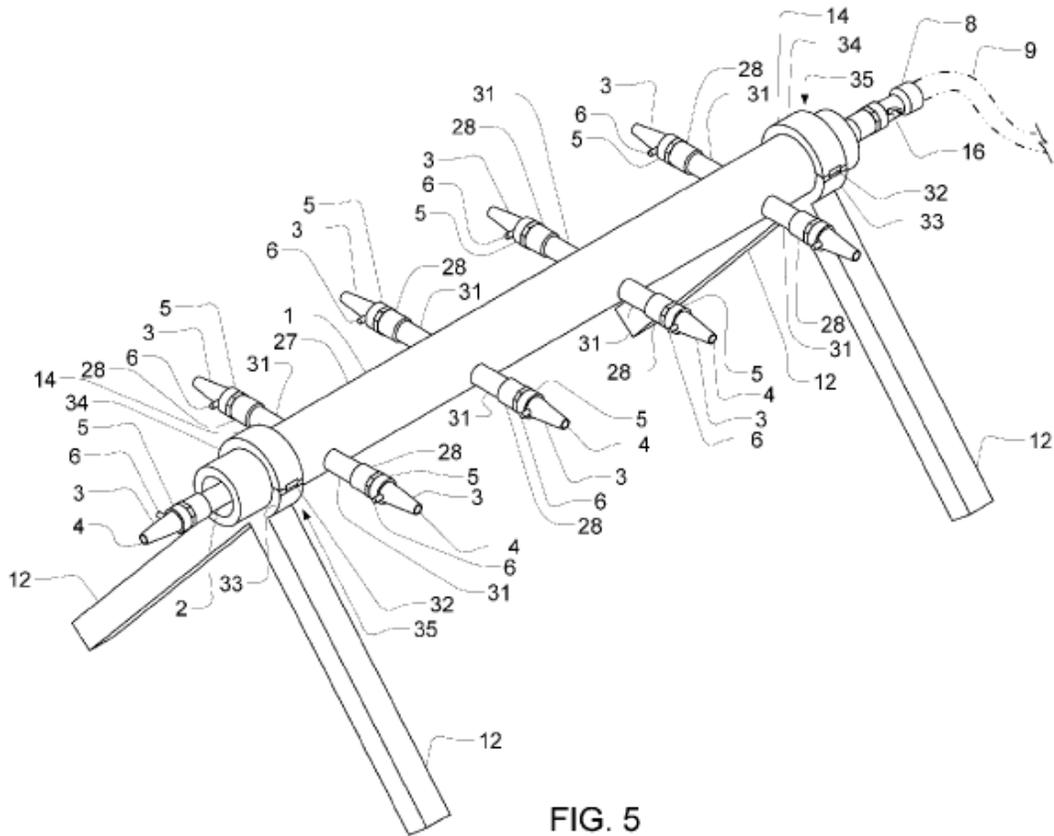


FIG. 5

(US 2008/0121309) (“Boise”).

Defendants contend that “common face” must be planar and rely on the prosecution history to import such a limitation to the claim. Yet, Figure 5 of Boise, as was cited in the prosecution history, shows a plurality of holes that are arguably aligned on a *plane* along the cylindrical portion of the housing. Importantly, the Examiner’s amendment simply requires that *a plurality of holes* extend through a “common face.” (Doc. No. 162-13, Prosecution History App. No. 14/492,487, at 2) (adding “plurality of holes extending through a common face of the housing.”) This addition is distinguishable from Figures 4 & 5 of Boise which show an aligned plurality of holes along the cylindrical portion of the housing, and a single hole at either end of the housing. (US 2008/0121309, Figs. 4, 5.) In other words, the Examiner did not necessarily

amend the claims to distinguish the present invention over the prior art by requiring that the “common face” be “planar” (indeed the Examiner states no such requirement in amending the plain language of the claim) because the important distinction is also made that a plurality of holes extend through a “common” or shared surface of the housing at a second end. Had the Examiner intended to distinguish the present invention based on a planarity requirement, then presumably he could have amended the claim to say “a plurality of holes extending through a *planar* face of the housing...” Moreover, the “planar” requirement also potentially excludes embodiments disclosed in the specification where the shape of the housing is “conical, cylindrical, pyramidal, etc...” ’066 Patent at 6:11-16; *see Vitronics Corp.*, 90 F.3d at 1583 (finding that a claim interpretation that excludes a preferred embodiment from the scope of the claim “is rarely, if ever, correct.”)

Defendants further argue that Plaintiffs’ interpretation cannot be correct because Boise shows a plurality of holes on a shared outer surface. However, this argument also fails to appreciate the plain language of claim 1 and the scope and context of the Examiner’s statements. In relevant part, claim 1 recites “a housing comprising an opening at a first end, and a plurality of holes extending through a common face of the housing at a second end...” ’066 Patent at 6:31-33. The Examiner clearly recognized the full scope of the claim as he amended the claim as follows: “a housing comprising an opening at a first end, and a plurality of holes extending through a common face of the housing ~~two-dimensional array of holes~~ at a second end.” (Doc. No. 162-13, Prosecution History App. No. 14/492,487, at 2.) Importantly, the plain language of the claim requires the “common face” to be at a second end of the housing. Boise does not disclose a shared outer surface with a plurality of holes at a *second end*.

Accordingly, the Court construes the term “common face” as “a shared outer surface of the housing through which a plurality of holes extend.”

II. “second end” (Claims 1, 2, 14)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“second end” (Claims 1, 2, 14)	“a part of the housing at or adjacent to a limit of the housing spaced apart from the first end”	“one of two linear limits of an object opposite the first end”

Plaintiffs argue that Defendants have pointed to nothing in the intrinsic record to support their narrow construction, and Defendants’ expert just picked the construction from a dictionary. (Doc. No. 162, at 5.) Defendants contend that their construction is consistent with how a person of ordinary skill in the art would understand the term “second end,” and that Plaintiffs’ proposed construction improperly adds the word “adjacent,” which is indefinite. (Doc. No. 172, at 8.) Defendants cite to the specification, which they contend describes a first end A and a second end B being located at opposite, linear limits of the housing. ’066 Patent at 2:33-50. Defendants also contend that both experts rely on Merriam-Webster’s Dictionary definition of “end,” which does not use the term “adjacent.” (Doc. No. 172, at 8, (citing Kudrowitz Dep., Ex. 1 at 98:25-99:21).) Plaintiffs reply that Defendants’ proposed construction violates the principles of claim differentiation because dependent claim 14 recites the outer surface “opposing the opening at the first end.” (Doc. No. 175, at 2.)

Claim 1 recites, “a housing comprising an opening at a first end, and a plurality of holes extending through a common face of the housing at a *second end*...” and “a plurality of flexible hollow tubes, each hollow tube attached to the housing at a respective one of the holes at the *second end* of the housing.” ’066 Patent at 6:31-36 (emphasis added). The specification describes the “second end” in an exemplary embodiment, which states: “An example embodiment of an apparatus includes a housing (e.g., casing, covering, etc. with a cavity inside)

with an opening at a first end and a plurality of holes at a *second end*...” ’066 Patent at 2:5-7.

Figure 1 shows the “second end” of an exemplary embodiment labeled “B”:

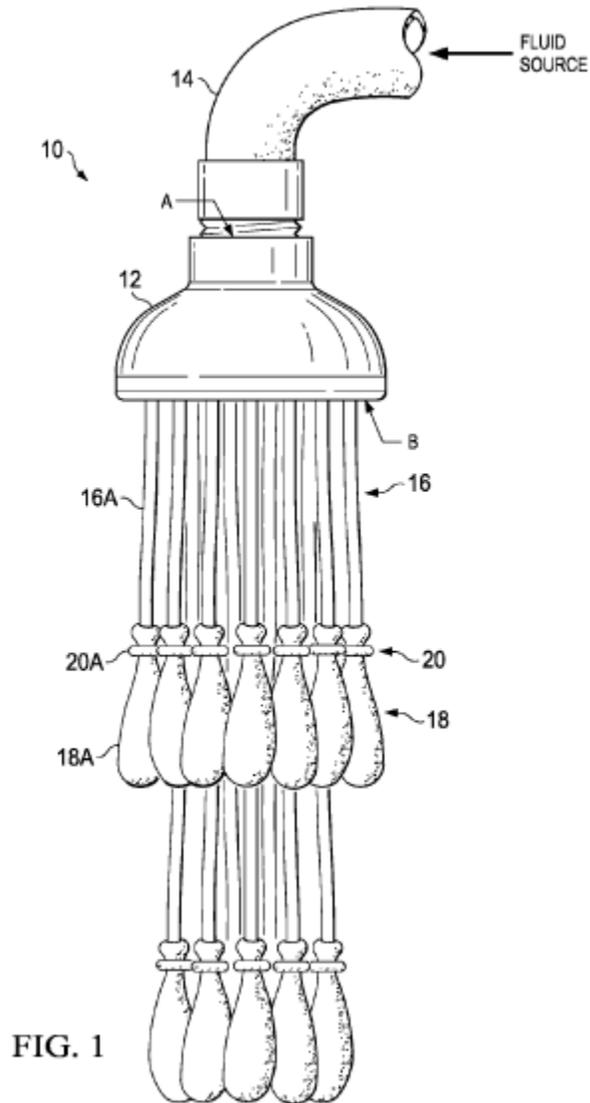


FIG. 1

(’066 Patent, Fig. 1; 2:33-37 (“FIG. 1 is a simplified diagram illustrating an example embodiment of a system 10 for filling containers with fluids. System 10 includes a housing 12 removably attached to a hose 14 (e.g., tube, pipe, etc.) on a first end A and to a plurality of hollow tubes 16 on a *second end* B.”) (emphasis added).)

While Figure 1 shows an exemplary embodiment where the “second end” is opposite the “first end,” dependent claim 14 specifically recites: “[t]he apparatus of claim 1, wherein each hole at the second end of the housing extends through an outer surface of the housing, the outer surface *opposing* the opening at the first end of the housing.” ’066 Patent at 7:27-30 (emphasis added). Whereas here, the dependent claim actually recites a “second end” opposing the “first end,” the doctrine of claim differentiation counsels against a construction requiring the “second end” to be opposite the “first end.” See *Phillips*, 415 F.3d at 1315 (“[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.”); *Alcon Research, Ltd. v. Apotex Inc.*, 687 F.3d 1362, 1367 (Fed. Cir. 2012) (citing 35 U.S.C. § 112 ¶ 4) (“It is axiomatic that a dependent claim cannot be broader than the claim from which it depends A dependent claim narrows the claim from which it depends.”); *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1334 (Fed. Cir. 2010) (“A person of ordinary skill would presume that a structure recited in a dependent claim will perform a function required of that structure in an independent claim.”). Accordingly, the Court must reject Defendants’ limitation that the “second end” be “opposite the first end.”

Similarly, there is nothing in the intrinsic record to support Defendants’ proposal that the “second end” be a “linear limit,” or Plaintiffs’ proposal that it be “adjacent to a limit.” Claim 1 plainly requires that the “second end” be a portion of the housing that has the claimed “common face” and “holes.” ’066 Patent at 6:31-36. The specification consistently discloses the “second end” as an outer limit of the housing and distinguishes the “second end” from the “first end.” (’066 Patent Fig. 1; 2:33-37 (“FIG. 1 is a simplified diagram illustrating an example embodiment of a system 10 for filling containers with fluids. System 10 includes a housing 12 removably attached to a hose 14 (e.g., tube, pipe, etc.) on a first end A and to a plurality of

hollow tubes 16 on a second end B.”.) Here, the requirements of the claim are clear regarding the term “second end,” and the specification merely informs the claim to understand that the “second end” is distinct from the first end. Accordingly, the Court construes the term “second end” to mean “an outer limit of the housing distinct from the first end.”

III. “substantially filled” (Claim 1)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“substantially filled” (Claim 1)	“by and large holding as much as is conveniently contained”	Defendants contend “substantially filled” is indefinite. Alternatively, Defendants propose the following claim construction: “when containers have reached a desired size and/or they are filled with the desired volume of fluid”

Plaintiffs assert that “the term ‘substantially’ has been defined by previous courts to mean ‘by and large.’” (Doc. No. 162, at 6, (citing *Apple, Inc. v. Samsung Elecs. Co.*, 932 F. Supp. 2d 1076, 1082 (N.D. Cal. 2013) (claim term “substantially centered” defined as “by and large centered”).) Plaintiffs also contend that their construction is “supported by the dictionary definition of ‘substantial’ and by use of the term ‘substantially’ in the ’066 patent specification.” (Doc. No. 162, at 6, (citing Ex. A15, Merriam-Webster Dictionary, <http://www.merriamwebster.com/dictionary/substantial> (“being largely but not wholly that which is specified”); and ’066 Patent at 4:46-47).) Plaintiffs cite to their expert’s declaration and contend that “‘filled’ is properly understood in the context of expandable containers, like water balloons as meaning ‘holding as much as is conveniently contained.’” (Doc. No. 162, at 6, citing (Kudrowitz Decl. at ¶¶ [015-019]).) Finally, Plaintiffs cite to Merriam-Webster Dictionary’s definition of “fill” as “to put into as much as can be held or conveniently contained.” *Id.* citing <http://www.merriamwebster.com/dictionary/fill>.

Defendants contend that the term “substantially filled” is indefinite because it depends on the subjective judgment of the user. (Doc. No. 172, at 9.) Alternatively, Defendants argue that if construction is required, one skilled in the art would understand “substantially filled” as “when containers have reached a desired size and/or they are filled with a desired volume of fluid.” (Doc. No. 172, at 9, (citing Kamrin Decl. at ¶¶ 39-40).) Defendants further contend that definition is consistent with the specification of the ’066 Patent, which discloses “[a]fter containers have reached a desired size or volume they may be detached from tubes” and “when containers have reached a desired size and/or they are filled with the desired volume of fluid, they may be removed from tubes.” ’066 Patent at 3:48-49; 4:60-62. Defendants also argue that Plaintiffs’ construction is not consistent with dependent claim 6, which recites “[t]he apparatus of claim 1, wherein each container comprises a volumetric measurement marking providing a visual reference for filling the container to a desired volume.” (Doc. No. 172, at 10.) Plaintiffs reply that Defendants’ use of the word “desired” renders “it is impossible to objectively tell if any expandable container is ever filled.” (Doc. No. 162, at 7.) Plaintiffs further argue that “substantially” is a well-known term of approximation used in the claim to modify “filled with water.” (Doc. No. 175, at 4.)

For the reasons explained in the Court’s concurrent opinion on indefiniteness, the term “substantially filled” is definite and means “when containers are filled with a volume of fluid such that shaking (as construed herein) overcomes the connecting force and causes the containers to detach.”

IV. “flexible” (Claim 1)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“flexible” (Claims 1, 5)	“capable of bending or being bent”	“not rigid or semi-rigid and capable of bending or being bent”

Plaintiffs argue that their construction of “flexible” is consistent with the plain and ordinary meaning of the term. (Doc. No. 162, at 7.) Plaintiffs cite to Merriam Webster’s dictionary in support, which defines “flexible” as “capable of bending or being bent.” *Id.* at 8, citing <http://www.merriam-webster.com/dictionary/flexible>. Plaintiffs further contend that this definition is consistent with the specification which states “hollow tubes 16 may be flexible, semi-rigid, or rigid, based on its material of construction, design, or a combination thereof.” ’066 Patent at 4:16-18. Plaintiffs also cite to the specification disclosure that “tubes 16 may be flexible to enable containers 18 to expand. Thus, as containers 18 fill with fluid and expand, they may push against each other, flexing tubes 16.” ’066 Patent at 4:23-25. Plaintiffs argue that Defendants’ proposed construction adds the unnecessary qualifier “not rigid or semi-rigid.” (Doc. No. 162, at 8.) Defendants argue that “because the specification uses all three terms, each term is presumed to have a different meaning” and therefore “‘flexible’ must exclude both ‘semi-rigid’ and ‘rigid.’” (Doc. No. 172, at 11.) Plaintiffs reply that just because the specification uses both the terms “flexible” and “semi-rigid,” does not mean the terms are mutually exclusive as Defendants’ suggest. (Doc. No. 175, at 4.)

Claim 1 recites “a plurality of *flexible* hollow tubes, each hollow tube attached to the housing at a respective one of the holes at the second end of the housing.” ’066 Patent at 6:33-36 (emphasis added). The specification characterizes the tubes’ flexibility by composition and design. *See, e.g.*, ’066 Patent at 4:10-18 (“In some embodiments, hollow tubes 16 may be made of a rigid material (e.g., steel, glass); in other embodiments, tubes 16 may be made of a flexible material (e.g., thin plastic). In some embodiments, tubes 16 may be thick, short and rigid; in other embodiments, tubes 16 may be slender, long and flexible. Thus, hollow tubes 16 may be flexible, semi-rigid, or rigid, based on its material of construction, design, or a combination

thereof.”). While the specification distinguishes rigid as composed of steel or glass and being of thick/short tubes compared to flexible slender/long tubes made of thin plastic, it does not clearly make these terms mutually exclusive, or define either term, as Defendants’ suggest. Moreover, the inclusion of “semi rigid” in the exemplary embodiment indicates there is a spectrum of flexibility allowable for the tubes. In this regard, the specification gives a spectrum based on material and design, and uses “flexible” in a manner consistent with its plain and ordinary meaning. Accordingly, the Court construes the term “flexible” as “capable of bending or being bent.”

V. “clamping” (Claim 1)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“clamping” (Claim 1)	“holding or pressing things together with a device”	“attaching, fastening, holding, clinching, or securing”

At the claim construction hearing, the parties indicated they had reached agreement and that “clamping” should be afforded its plain and ordinary meaning. Accordingly, the Court finds that no construction is necessary and “clamping” shall have its plain and ordinary meaning.

VI. “elastic fastener” (Claim 1)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“elastic fastener” (Claim 1)	“an elastic element for attaching things together”	“any internal or external resilient object or structure that attaches things together and closes or partially obstructs a passageway of fluid flow in a container”

Plaintiffs argue that their construction of “elastic fastener” is consistent with the plain and ordinary meaning of the term. (Doc. No. 162, at 11.) Plaintiffs cite to Merriam Webster’s dictionary in support, which defines “fasten” as “to attach (something) or join (two things or two parts of something),” and “elastic” as “capable of recovering size and shape after deformation.”

Id. at 10-11, citing <http://www.merriamwebster.com/dictionary/fasten>,

<http://www.merriamwebster.com/dictionary/elastic>. Plaintiffs further contend that this definition is consistent with the specification which states “each elastic fastener clamping each container to a corresponding hollow tube,” and ““In an example embodiment, elastic valves 20 comprise elastic fasteners, such as O-rings.” ’066 Patent, Abstract; 2:57-59; FIG. 2.

Defendants argue that their proposed definition of “any internal or external resilient object or structure that attaches things together and closes or partially obstructs a passageway of fluid flow in a container” is consistent with the specification of the ’066 Patent, which equates an “elastic fastener” with an “elastic valve.” ’066 Patent at 2:55-57. Defendants cite to the multiple disclosures discussing valves and examples of elastic valves. (Doc. No. 172, at 13, citing ’066 Patent at 2:57-67.) Plaintiffs contend that Defendants’ proposal broadens the term by adding “internal or external” “or structure.” (Doc. No. 162, at 11.) Defendants disagree with this characterization and argue that the specification discloses valves both internal and external, and argue that Plaintiffs’ proposal is improperly based on dictionary definitions. (Doc. No. 172, at 13.) Plaintiffs further reply that Defendants’ proposal improperly equates an “elastic fastener” with an “elastic valve” where the specification makes clear that an “elastic fastener” is an example of an “elastic valve.” (Doc. No. 175, at 6, (citing ’066 Patent at 2:57-59).)

Claim 1 recites, “a plurality of *elastic fasteners*, each *elastic fastener* clamping a respective one of the plurality of containers to a corresponding hollow tube, and each *elastic fastener* configured to provide a connecting force that is not less than a weight of one of the containers when substantially filled with water, and to automatically seal its respective one of the plurality of containers upon detaching the container from its corresponding hollow tube, such that shaking the hollow tubes in a state in which the containers are substantially filled with water overcomes the connecting force and causes the containers to detach from the hollow tubes

thereby causing the *elastic fasteners* to automatically seal the containers.” ’066 Patent at 6:39-51 (emphasis added). Notably, the claims do not recite “elastic valve(s)” or use the term interchangeably with “elastic fastener.” Similarly, the specification does not use the terms interchangeably or equate the meaning of the terms. Instead, the specification clearly refers to the “elastic fastener” as a specific subset of an elastic valve, disclosing “[i]n an example embodiment, *elastic valves 20 comprise elastic fasteners*, such as O-rings.” ’066 Patent at 2:57-59 (emphasis added). There is also nothing in the intrinsic record to support Defendants’ further limitation that the elastic fastener “closes or partially obstructs a passageway of fluid flow in a container.”

Claim 1 plainly recites that the elastic fasteners clamp the claimed containers to the claimed hollow tubes, provide the claimed connecting force, and seal the claimed containers. ’066 Patent at 6:39-51. The specification discloses “elastic fasteners” in a consistent manner. ’066 Patent at 2:57-59. Therefore, the Court finds that the plain language of claim 1 provides the proper context and understanding of what is meant by the term “elastic fastener” as used in the ’066 Patent, and construes “elastic fastener” to mean “an elastic element for attaching things together.”

VII. “attached” (Claims 1, 11, 13)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“attached” (Claims 1, 11, 13)	“connected or joined to something”	“permanently joined, connected or bound to something”

Plaintiffs cite to the claims to argue that “attached” is used in the context of a hollow tube that is attached to a housing, a container that is removably attached the hollow tube, a housing attached to a valve that is coupled to a fluid source, and a hose attached to a water supply. (Doc. No. 162, at 12, (citing claims 1, 11, 13).) Plaintiffs further contend that “the specification

repeatedly uses ‘attached’ to describe the connection of separate elements. *Id.* citing ’066 Patent at 2:35, 45-50; 4:55; 5:1-6. Finally, Plaintiffs cite to the dictionary, which defines attached as “connected or joined to something.” *Id.* citing (Merriam-Webster Dictionary, <http://www.merriamwebster.com/dictionary/attached>.) Plaintiffs contend that Defendants’ construction is flawed because it contains the unwarranted qualifier “permanently.” *Id.* Defendants argue that independent claim 1 sets forth two different types of connections: “attached” and “removably attached,” *i.e.* (1) “each hollow tube [is] attached to the housing at a respective one of the holes at the second end of the housing” and (2) “each container [is] removably attached to a respective one of the hollow tubes.” (Doc. No. 172, at 14.) Therefore, Defendants argue that “attached” must mean something other than “removably attached.” *Id.*

Defendants wish to insert the requirement that “attached” be “permanently joined, connected, or bound to something.” There is no requirement in the claims that an attachment be “permanent.” Defendants contend this distinction is drawn because claim 1 also recites “removably attached.” However, the specification makes clear that “permanent” attachment is only an exemplary embodiment. ’066 Patent at 2:46-50 (“In some embodiments, tubes 16 may be permanently attached (e.g., welded, brazed, stuck with adhesives, press-fitted, etc.) to housing 12. In other embodiments, tubes 16 may be removably attached (e.g., with threads, pressure, etc.) to housing 12.”). Thus, had the patentee wanted to claim “permanently attached,” he certainly could have done so, but did not do so here. Moreover, the specification consistently uses the term “attached” to refer to non-permanent attachments, such as the connection between the housing and the hose/spigot. ’066 Patent at 5:1-6 (“[t]urning to FIG. 3, FIG. 3 is a simplified diagram illustrating example details of a valve 31 that may be attached between hose 14 and housing 12 according to an embodiment of system 10. One end of valve 31 may be attached to hose 14 and

the other end may be attached to threaded opening 22 of housing 12 (e.g., using threads); 5:13-15 (“[h]ousing 12 may be attached to a spigot 33 (e.g., nozzle, faucet, outlet etc.) that connects to the fluid source.”).

Because claim 1 does not recite “permanently attached” and the specification consistently uses “attached” to refer to “non-permanent” joinder, the Court construes the term “attached” consistent with its plain and ordinary meaning to mean “connected or joined to something.”

VIII. “configured” (Claims 1, 9, 11)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“configured” (Claims 1, 9, 11)	Plaintiffs contend that the term does not need construction.	“to set up for operation in a particular way”

Plaintiffs contend that this term needs no construction and that “configured to” is properly used as functional language in an apparatus claim. (Doc. No. 162, at 13.) Plaintiffs cite *Typhoon Touch* in support, arguing that the use of such language covers devices “‘capable’ of performing the recited function,” but it does not cover devices that “might later be modified to perform that function.” *Typhoon Touch Technologies Inc. v. Dell Inc.*, 659 F.3d 1376, 1380 (Fed. Cir. 2011).

Defendants argue that “configured” means “to set up for operation in a particular way” based on the claim language of claim 1, which requires each elastic fastener configured to perform three specific functions (1) “to provide a connecting force that is not less than a weight of one of the containers when substantially filled with water,” (2) “to automatically seal its respective one of the plurality of containers upon detaching the container from its corresponding hollow tube; and (3) “such that shaking the hollow tube in a state in which the containers are substantially filled with water overcomes the connecting force and causes the containers to detach from the hollow tubes thereby causing the elastic fasteners to automatically seal the

containers.” (Doc. No. 172, at 15.) Defendants further argue that functions (1) and (3) were added through an Examiner’s Amendment, to place the application in condition for allowance, and cite the Examiner’s Statement of Reasons for Allowance that “beginning with ‘such that shaking . . .’ defines an upper limit of the connecting force and thus defines the elastic fastener in a way which distinguishes over Urspringer.” *Id.*

Here, claim 1 recites “a plurality of elastic fasteners, each elastic fastener clamping a respective one of the plurality of containers to a corresponding hollow tube, and each elastic fastener **configured to** provide a connecting force that is not less than a weight of one of the containers when substantially filled with water, and to automatically seal its respective one of the plurality of containers upon detaching the container from its corresponding hollow tube, such that shaking the hollow tubes in a state in which the containers are substantially filled with water overcomes the connecting force and causes the containers to detach from the hollow tubes thereby causing the elastic fasteners to automatically seal the containers, wherein the apparatus is **configured to** fill the containers substantially simultaneously with a fluid.” ’066 Patent at 6:39-53 (emphasis added). Nothing in the specification or prosecution history provides any support to construe this term in a manner other than what the plain language of the claim requires. Indeed, even during prosecution, the Examiner describes his amendment to claim 1 as “a configuration and functional capability.” Such functional claiming is well known and understood. *See, e.g., Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008) (noting that “functional language” is permissible in claims); *Yodlee, Inc. v. CashEdge, Inc.*, No. C 05-01550 SI, 2006 WL 3456610 (N.D. Cal. Nov. 29, 2006) (Illston, J.) (“[The claims at issue] describe what the apparatuses do, when used a certain way.”). Accordingly, no construction is necessary.

IX. “shaking” (Claim 1)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“shaking” (Claim 1)	“applying an acceleration”	Defendants contend the “shaking” element is indefinite. Alternatively, Defendants propose the following claim construction: “applying an alternating acceleration”

Plaintiffs argue that the claims and specification support a definition of “applying an acceleration.” (Doc. No. 162, at 15.) Plaintiffs rely on the portion of the specification that states: “[i]n another example embodiment, the connecting force holding filled containers 18 to tubes 16 may be overcome by an upward acceleration on tubes 16, for example, when they are shaken.” (Doc. No. 162, at 15.) Thus, filled containers 18 may be detached by shaking housing 12 (or tubes 16) sufficiently vigorously to cause containers 18 to fall off from tubes 16.” ’066 Patent at 3:52-57. Plaintiffs contend that Defendants’ proposal that the acceleration be “alternating” is incorrect because the specification describes only an upward movement, and alternating indicates movement in two opposite directions. (Doc. No. 162, at 15.)

Defendants contend that the “shaking” limitation is indefinite; however, if construed, it should be consistent with the plain and ordinary meaning. (Doc. No. 172, at 16.) Defendants cite to Merriam-Webster’s dictionary, which defines “shaking” as “to move sometimes violently back and forth or up and down with short, quick movements.” *Id.* Defendants also cite to the specification, which discloses that “the connecting force holding filled containers 18 to tubes 16 may be overcome by an upward acceleration on tubes 16, for example, when they are shaken.” ’066 Patent at 3: 52-57. Defendants argue that Plaintiffs misinterpret this “upward movement” because shaking necessarily requires movement in two directions. (Doc. No. 172, at 16.)

As an initial matter, there is no intrinsic support for Defendants’ added requirement that “shaking” be defined as “alternating” movement. Indeed, the specification, in part, refers to this claimed detachment by “shaking” as overcome by “an upward acceleration.” ’066 Patent at 3:50-55 (“[i]n another example embodiment, the connecting force holding filled containers 18 to tubes 16 may be overcome by an upward acceleration on tubes 16, for example, when they are shaken.”) Defendants cite to Merriam-Webster’s dictionary, which defines “shaking” as “to move sometimes violently back and forth or up and down with short, quick movements.” (Doc. No. 172, at 16.) However, there is nothing in the intrinsic record that would compel the “alternating” requirement, and instead, the specification discloses “an upward acceleration” as discussed above. Because the term “shaking” is inextricably tied to the “connecting force” in operation of claim 1, it is understood that an upward acceleration alone would be sufficient to detach the containers when practicing the claim. Indeed, in the prosecution history, the Examiner remarks that ‘such that shaking...’ defines an *upper* limit of the connecting force...” Therefore, to limit the claim to require alternating movement would exclude potential disclosed embodiments. Accordingly, the Court construes the term “shaking” to mean “applying an acceleration.”

X. “removably attached” (Claim 1)

Claim Term	Plaintiffs’ Proposal	Defendants’ Proposal
“removably attached” (Claim 1)	No construction is needed; the ordinary meaning of claim language as understood by a person of skill in the art is readily apparent. If the Court believes that a construction is necessary, it should be: “connected to something such that it can be disconnected in	“not permanently joined, connected or bound to something”

Plaintiffs contend that no construction is necessary because claim 1 explains how the containers are supposed to be removed by shaking. (Doc. No. 162, at 17.) Plaintiffs also contend this is disclosed in the specification where it states “the connecting force holding filled containers 18 to tubes 16 may be overcome by an upward acceleration on tubes 16, for example, when they are shaken.” (’066 Patent at 3:52-55.) Plaintiffs therefore argue that if a construction is necessary, an appropriate construction of “removably attached,” is “connected to something such that it can be disconnected in ordinary use.” (Doc. No. 162, at 17.) Defendants argue that in light of their arguments regarding “attached,” one skilled in the art would interpret “removably attached” to mean “not permanently joined, connected or bound to something.” (Doc. No. 172, at 17.) Defendants argue that Plaintiffs’ proposal of “ordinary use” is indefinite, but if not it actually supports Defendants’ argument for the meaning of “attached” and “removably attached.” Defendants point to the specification that discloses that “tubes 16 may be permanently attached (e.g., welded, brazed, stuck with adhesives, press-fitted, etc.),” and therefore argue that these “permanent attachments could only be disconnected via non-ordinary use, e.g., by cutting two objects apart. (Doc. No. 172, at 17, (citing ’066 Patent at 2:46-50).)

Claim 1 recites “a plurality of containers, each container *removably attached* to a respective one of the hollow tubes.” ’066 Patent at 6:37-38 (emphasis added). The specification describes “removably attached” in the following manner: “[i]n some embodiments, tubes 16 may be permanently attached (e.g., welded, brazed, stuck with adhesives, press-fitted, etc.) to housing 12. In other embodiments, tubes 16 may be removably attached (e.g., with threads, pressure, etc.) to housing 12.” ’066 Patent at 2:46-50. Because the plain language of the claim uses the term “removably,” and the specification juxtaposes “removably” with “permanent” attachment,

“removably attached” is understood in the context of the ’066 Patent as “not permanent.” Therefore, the Court construes the term “removably attached” as “not permanently joined, connected or bound to something.”

Finally, the parties submitted the following agreed constructions:

U.S. Patent No. 9,051,066 Claim Language	Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction	Court’s Construction
“connecting force”	[AGREED]	Defendants contend that “connecting force” is indefinite. If the Court determines that the term is not indefinite, the parties agree to the construction at right.	“force that holds a container onto a tube”
“not less than”	[AGREED]	[AGREED]	“equal to or greater than”
“container”	[AGREED]	[AGREED]	“an object that can hold something, such as fluids”

The Court, having reviewed the parties’ agreed constructions, as well as the ’066 Patent claims, specification, and prosecution history, finds the parties’ agreed constructions appropriate and construes the terms as set forth above.

CONCLUSION

For the foregoing reasons, the Court adopts the constructions set forth above.

So ORDERED and SIGNED this 28th day of April, 2016.



JOHN D. LOVE
UNITED STATES MAGISTRATE JUDGE