

**IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF ARKANSAS
FAYETTEVILLE DIVISION**

CAMELBAK PRODUCTS, LLC

PLAINTIFF

V.

CASE NO. 5:21-CV-05109

ZAK DESIGNS, INC.

DEFENDANT

MEMORANDUM OPINION AND ORDER

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I. INTRODUCTION

As Plaintiff CamelBak Products, LLC’s patents explain, “For some time people have recognized the need to stay hydrated.” (Doc. 64-1, p. 14). This need has created a market for well-designed, reusable water bottles. CamelBak and Defendant Zak Designs, Inc. are competitors in this market. CamelBak brought this case alleging Zak is infringing on its patents for water bottles and water bottle lids.

The parties now ask the Court to construe certain terms that appear in the claims—the recitations at the end of a patent that define the scope of the invention—of CamelBak’s patents. The Court conducted a claim construction hearing on December 2, 2022. In advance of the hearing, the parties submitted a Joint Claim Construction and Prehearing Statement (Doc. 63) which identified 23 claim terms in dispute. Pursuant to Northern District of California Patent Local Rule 4.3(c),¹ the parties also identified the 10 most significant terms for the Court to construe during the claim construction stage of this case. The parties then briefed their proposed constructions of those 10 terms. See Docs. 64, 65, 69. The parties’ briefing included declarations and deposition testimony from CamelBak’s expert witness, Jim Goldman, and Zak’s expert, John Hamilton. There is no dispute that both Mr. Goldman and Mr. Hamilton, as experienced mechanical engineers, qualify as persons of ordinary skill in the art. At the hearing, the Court entertained oral argument and presentations on the disputed terms identified as most significant by the parties. After the hearing, the Court instructed the parties to submit supplemental briefing on their proposed constructions of an additional disputed term, variations of the word “bias.” See Docs. 71, 73, 74.

Having fully examined the patents, briefing, exhibits, expert opinions, and the parties’ oral arguments and presentations, the Court construes the disputed claim terms as stated below.

¹ The parties consented to the Court’s adoption of the Northern District of California Patent Local Rules in this case.

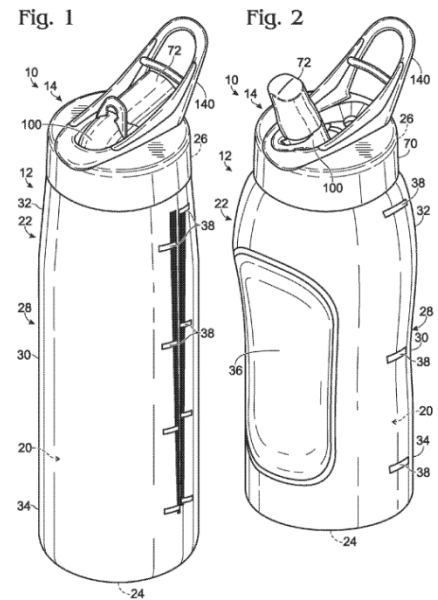
II. BACKGROUND

CamelBak's Amended Complaint (Doc. 61) alleges Zak is infringing on six of its patents which fall into two patent families (collectively, "the Asserted Patents"). Within the six Asserted Patents, CamelBak alleges Zak has infringed 75 claims. The Asserted Patents are as follows:

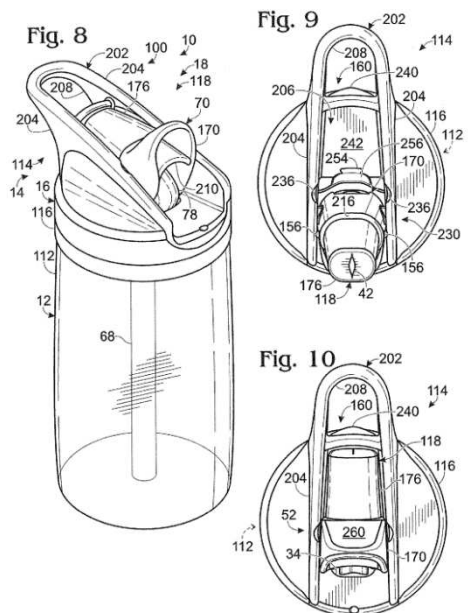
Family	Patent Number	Priority Date
Drink Bottles Leak-proof flip-top water bottles	9,463,911 ("the '911 patent")	Apr. 11, 2005
	10,676,255 ("the '255 patent")	
Drink Containers Push-button flip-top water bottles	9,782,028 ("the '028 patent")	Jan. 21, 2009
	9,820,595 ("the '595 patent")	
	10,165,879 ("the '879 patent")	
	10,542,833 ("the '833 patent")	

The '255 patent is a continuation of the '911 patent, and their specifications—the figures and text in a patent that precede the claims—are nearly identical. Similarly, the '595, '879, and '833 patents are continuations of the '028 patent with near-identical specifications for each patent. Therefore, this Opinion cites only to the '911 and '028 specifications. However, certain of the disputed claim terms appear only in the continuation patents.

The '911 patent (Doc. 64-1) describes, in part, a drink container with a removable cap and a fluid conduit (tube). The cap has a manually operated drink spout and valve that allow for a closed configuration, wherein the spout is stowed and the valve prevents liquid from flowing through the fluid conduit, and an open configuration, wherein the spout is in a dispensing position and the valve allows liquid to flow through the fluid conduit. The drink spout has a flexible mouthpiece that opens when the user bites down on it, allowing the user to drink liquid. The cap also has an air return assembly that allows air to flow into the drink container when the drink spout is in the dispensing position but does not allow air to flow when the spout is stowed.



The '028 patent (Doc. 64-3) describes a drink container that is similar to the drink container described in the '911 patent. The container includes, in part, the following features: a cap assembly; a mouthpiece that alternates between a stowed configuration and a dispensing configuration; a tube that may be crimped to restrict the flow of liquid when the mouthpiece is stowed; a mouthpiece that is biased toward being in the dispensing configuration and moves automatically to that configuration upon user activation; a mouthpiece that is opened through an action of the user, such as



biting down; two catch structures that secure the mouthpiece in the stowed position until activated; and a user release mechanism that allows the user to activate and release the mouthpiece from its stowed configuration so the mouthpiece can move automatically to the dispensing configuration.

III. LEGAL STANDARD

“Victory in an infringement suit requires a finding that the patent claim ‘covers the alleged infringer’s product or process,’ which in turn necessitates a determination of ‘what the words in the claim mean.’” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996) (quoting H. Schwartz, *Patent Law and Practice* 1, 80 (2d ed.1995)). This determination of the meaning of claim terms, known as claim construction, “is exclusively within the province of the court.” *Id.* at 372.

Claim terms are given “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc) (quotation and citations omitted). “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314 (citing *Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001)). In other words, some claim terms do not require any construction at all.

Nevertheless, “[w]hen the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). “Thus, a determination that a claim term needs no construction or has the plain and ordinary meaning may be

inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.” *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1318 (Fed. Cir. 2016) (cleaned up).

Claims must be construed in light of the intrinsic evidence—the claim language itself, the specification, and the patent’s prosecution history. The claim language can “provide substantial guidance as to the meaning of particular claim terms,” both through the context in which the claim terms are used and through comparison with other claims in the patent. *Phillips*, 415 F.3d at 1314. “[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.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). The prosecution history, while often lacking the “clarity” of the specification, also constitutes intrinsic evidence that provides “evidence of how the PTO and the inventor understood the patent.” *Phillips*, 415 F.3d at 1317.

Courts may also consider extrinsic evidence—such as dictionaries and expert testimony—though such evidence is given less weight than intrinsic evidence. *Id.* Dictionaries may reveal what the ordinary and customary meaning of a term would have been to a person of ordinary skill in the art at the time of the invention. *See Frans Nooren Afdichtingssystemen B.V. v. Stopaq Amcorr Inc.*, 744 F.3d 715, 722 (Fed. Cir. 2014). Expert testimony can also help “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Phillips*, 415 F.3d at 1318.

IV. DISCUSSION

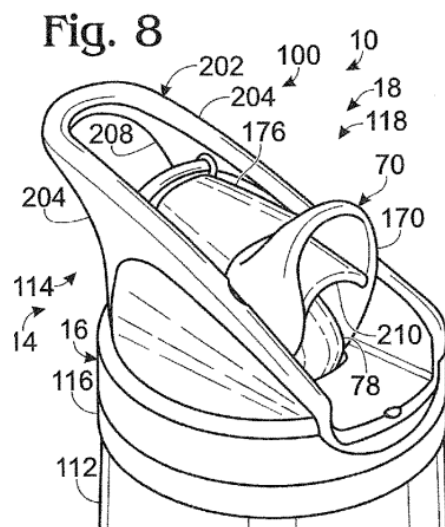
A. Agreed Constructions		
Claim Term	Patents	Construction
“constructed as a unitary assembly”	'028, '595, '879, and '833 Patents	“constructed as a single piece that includes a group of parts or distinct portions”
“friction-fit arrangement”	'028, '595, '879, and '833 Patents	“arrangement in which one part is fitted inside another part such that relative movement between them is resisted by friction”
“fluid conduit”	'911 and '255 Patents	“fluid-carrying structure, such as a channel, pipe, or tube”
“mouthpiece assembly”	'028, '595, '879, and '833 Patents	“the group of parts or distinct sections that, taken together, allow the user to drink liquid”
“air return assembly”	'911 Patent	“a group of parts that, taken together, form a unit that is adapted to return air”

In the Joint Claim Construction and Prehearing Statement, the parties agreed to the constructions of two claim terms, “constructed as a unitary assembly” and “friction-fit arrangement.” In their claim construction briefing, the parties informed the Court they had also reached an agreement on the construction of one of the ten most significant terms, “fluid conduit.” On the record at the claim construction hearing, the parties agreed to the constructions of two additional disputed terms, “mouthpiece assembly” and “air return assembly.” Having reviewed these agreed constructions in the context of the Asserted Patents, the Court agrees with the parties’ constructions and adopts them as stated above.

The Court now turns to the remaining disputed terms, taking them up in the order presented by the parties at the claim construction hearing.

B. “rigid”		
'028, '595, '879, and '833 Patents		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
plain and ordinary meaning	indefinite	plain and ordinary meaning

The term “rigid” is used extensively in the Asserted Patents’ specifications and claims. For example, claim 10 of the '028 patent recites that “the mouthpiece assembly further includes a rigid collar member that is pivotally coupled to the base and which includes a crimping portion,” and “wherein the rigid collar member engages and crimps the crimping region to restrict the flow of drink liquid through the liquid passage when the mouthpiece assembly is in the stowed configuration.” (Doc. 64-3, pp. 18–19). This “rigid collar member” 170 is seen in figure 8 of the '028 patent:



Id. at p. 6. The '028 specification further states that “[i]n some embodiments, the collar member may be rigid or at least semi-rigid.” *Id.* at 11. However, only “rigid” appears in the claim language; “semi-rigid” is used only in the specification.

Zak argues the term “rigid” is indefinite. Indefiniteness occurs when the “claims, read in light of the specification . . . and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instr., Inc.*, 572 U.S. 898, 901 (2014). A finding of indefiniteness renders the claim invalid. Because patents are presumptively valid, 35 U.S.C. § 282(a), the party asserting indefiniteness bears the burden of proof and must demonstrate invalidity by clear and convincing evidence, *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1345 (Fed. Cir. 2007) (citing *AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1238–39 (Fed. Cir. 2003)).

Zak’s expert, Mr. Hamilton, attests that “that the scope of the claim term ‘rigid’ was not reasonably certain to a person of ordinary skill in the art in January 2009 or at any time since,” (Doc. 65-1, ¶ 22), because the specification describes the collar member as either “rigid” or “semi-rigid” and “there are no functional standards in the specifications or prosecution histories to use to determine when the collar member is rigid, semi-rigid, or other than rigid or semi-rigid,” *id.* at ¶ 26. In short, Zak contends that rigidity exists on a spectrum, and the intrinsic evidence provides no guidance as to what level of rigidity the claims are referencing when they use the term.

CamelBak admits that rigidity exists on a spectrum but counters that the scope of “rigid” is not indefinite because the specification extensively discusses the term and even includes examples of the materials that would be “rigid” in this context. CamelBak further argues that “rigid” is a well-known term to mechanical engineers and the admissions of

Zak's expert are fatal to Zak's indefiniteness argument. At his deposition, Mr. Hamilton admitted that

- the examples of rigid materials in the specification helped clarify what "rigid" means in the context of the patents;
- the collar member must be rigid enough to collapse the silicone crimping region; and
- while rigidity is context specific and difficult to define, "engineers know it when they see it."

(Doc. 64-9, pp. 11, 18, 20). CamelBak's expert, Mr. Goldman, attests that the meaning of "rigid" in this context would be clear to a person of ordinary skill in the art. See Doc. 64-7, ¶ 32.

The Court finds that Zak has not met its burden to show "rigid" is indefinite by clear and convincing evidence. The contentions of Zak's expert as to the indefiniteness of "rigid" are undercut by his later admissions that a person of ordinary skill in the art could determine what "rigid" means when presented with the intrinsic evidence here. While rigidity is a relative measurement, the specification and claims adequately define the level of rigidity required by the inventions. For example, the claim language makes clear that the collar member must be sufficiently rigid to crimp the tube when the mouthpiece is in the stowed configuration and thereby prevent liquid from passing through the tube. This context, along with the figures and "rigid" material examples, provides sufficient objective standards with which a person of ordinary skill in the art could determine the level of rigidity required by the inventions. The specification's singular use of the term "semi-rigid"

to describe a possible embodiment of the collar member does not render “rigid”—the term actually used in the claims—indefinite.

Having found “rigid” not indefinite, the Court turns to the proper construction of the term and finds that “rigid” is an easily understood term that requires no construction in the context of these patents. The Court agrees with CamelBak that the meaning of “rigid” in this context would be clear not only to a person of ordinary skill in the art but also to lay judges and juries. Aside from asserting that “rigid” is indefinite, Zak has not offered a contrary construction.

C. “the resilient mouthpiece is more resilient than the drink spout”		
’911 Patent		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
plain and ordinary meaning	indefinite	plain and ordinary meaning

This term appears in claims 1 and 25 of the ’911 patent. Claim 1 states that the invention includes

a resilient mouthpiece removably mounted on the drink spout and having a dispensing face, which includes the dispensing outlet, and a mouthpiece base that is shaped to restrict rotation of the resilient mouthpiece on the drink spout; wherein when the drink spout is in the dispensing position, the dispensing outlet is positioned further away from the cap assembly base than when the drink spout is in the Stowed position, *wherein the resilient mouthpiece is more resilient than the drink spout* and is adapted to resiliently compress responsive to compressive forces applied to the resilient mouthpiece by a user’s teeth

(Doc. 64-1, p. 23) (emphasis added). The specification provides silicone as an example of a “resiliently deformable” material and polycarbonate as a “rigid, or stiff,” material. (Doc. 64-1, pp. 15, 19).

Zak contends this term is indefinite because the '911 patent provides no objective standard to measure resilience and therefore the scope of “more resilient” would not be reasonably certain to a person of ordinary skill in the art. Mr. Hamilton attests that the phrase “the resilient mouthpiece is more resilient than the drink spout” could mean one of four things:

- (1) the mouthpiece springs back or returns to its previous position or shape after being compressed *faster* than the drink spout;
- (2) the mouthpiece springs back or returns to its previous position or shape without damage after being *compressed to a greater extent* than the drink spout;
- (3) the mouthpiece can be *compressed for a longer period of time* and still spring back or return to its previous position or shape compared to the drink spout; or
- (4) the mouthpiece can be *compressed and decompressed more times* than the drink spout and still spring back or return to its previous position or shape without damage.

(Doc. 65-1, ¶ 60). Based on Mr. Hamilton’s opinion that all four of these meanings are plausible, Zak argues the scope of the term is not reasonably certain.

CamelBak counters that it is clear in context that this term means that the “mouthpiece” must be sufficiently resilient to compress in response to a user’s teeth, whereas the “drink spout” must be “sufficiently non-resilient, or rigid, so as to be able to apply a crimping force that restricts the flow of fluid through the fluid conduit.” (Doc. 64, p. 15). CamelBak points to Mr. Hamilton’s admissions at his deposition that resilience has a well-known technical meaning and that a person of ordinary skill in the art would be able to compare the relative resilience of any two materials. See Doc. 64-9, pp. 25–26.

CamelBak argues that Mr. Hamilton ignored this technical meaning in favor of a Webster's Dictionary definition of "resilient," from which he derived the four plausible meanings above.

The Court finds that Zak has not met its burden to show "the resilient mouthpiece is more resilient than the drink spout" is indefinite by clear and convincing evidence. The surrounding claim language and context from the specification sufficiently define the scope of the term—the mouthpiece must be made of a material that is more resilient, such as silicone, than the material the drink spout is made from. Mr. Hamilton agreed during his deposition that an engineer would understand resilience of a material to be "the elastic energy stored up in a cubic inch of material at the elastic limit" and that resilience is measurable. (Doc. 64-9, p. 25). Consistent with this testimony, Zak conceded at the hearing that a person of ordinary skill in the art would know what "resilient" means.

Zak maintains, however, that the dispute is whether adding the word "more" before "resilient" makes the term indefinite because the Webster's Dictionary definition gives four possible meanings of "resilient." But Mr. Hamilton also conceded at his deposition that a person of ordinary skill in the art could compare the resilience of two materials in the context of the '911 patent—in other words, a person of ordinary skill in the art could determine whether material A is more resilient than material B. That is all the claim term requires. A lay dictionary definition of "resilient" that allows for four possible types of resilience cannot make the term's scope indefinite when there is an agreed technical meaning. Given these findings, the Court cannot say that the term "fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instr., Inc.*, 572 U.S. 898, 901 (2014).

Lacking any counter-construction from Zak, the Court finds that “the resilient mouthpiece is more resilient than the drink spout” should be given its plain and ordinary meaning. Given that the parties’ experts agree that the resilience of a material is measurable and comparable, the Court finds that the ordinary meaning of the claim term to a person of ordinary skill in the art will not be meaningfully in dispute at trial.

D. “release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration”		
’028, ’595, ’879, and ’833 Patents		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
plain and ordinary meaning	indefinite	plain and ordinary meaning

Zak argues this phrase is indefinite because “its bias” lacks an antecedent basis. “The requirement of antecedent basis is a rule of patent drafting, administered during patent examination.” *Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006). The rule requires that the first time a term is used it be prefaced with an indefinite article—“a” or “an”—and then any subsequent use of the same term should be prefaced by a definite article—“said” or “the”—so the reader is clear that the latter term refers back to the former. “[F]ailure to provide explicit antecedent basis for terms does not always render a claim indefinite” because “an antecedent basis can be present by implication.” *Id.* Accordingly, whether a term is given an explicit antecedent basis or not, the inquiry remains whether the term “fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instr., Inc.*, 572 U.S. 898, 901 (2014).

Zak contends that “its bias” lacks an antecedent basis because the claim language does not include a recitation of “a bias.” Zak points out that the patents’ other uses of “bias” were as a verb or adjective—“biased” or “biases.” Zak argues that the use of bias as a noun—“its bias”—is ambiguous. Zak points to the following section of the ‘028 patent’s specification:

Mouthpiece assemblies 18 according to the present disclosure are biased toward the dispensing configuration and therefore may be described as having a biasing mechanism 50. The bias of a mouthpiece assembly according to the present disclosure may be provided by the internal bias created by the material from which at least a portion of the mouthpiece assembly is constructed. For example, at least a portion of a mouthpiece assembly, such as crimping region 44, may be constructed of a resiliently deformable material. An illustrative, non-exclusive example of a suitable resiliently deformable material includes (but is not limited to) silicone. Additionally or alternatively, a biasing mechanism 50 may include at least one spring. Other configurations are also within the scope of the present disclosure.

(Doc. 64-3, p. 10). Mr. Hamilton attests that that this section describes three different ways the mouthpiece could be biased: “(1) an internal bias created by the material from which the mouthpiece assembly is constructed; (2) an external bias that includes at least one spring; or (3) an internal bias and an external bias.” (Doc. 65-1, ¶ 36) (emphasis in original). Because it is not clear which of these three is being referred to by “its bias,” Zak argues a person of ordinary skill in the art could not determine the scope of the claim with reasonable certainty.

The Court disagrees with Zak’s reading of the claims and specification. What Zak and Mr. Hamilton refer to as three ways the mouthpiece assembly can be biased are actually three different ways the mouthpiece assembly’s bias *can be accomplished*. The mouthpiece assembly’s bias is the same—it returns to the dispensing configuration—whether that bias is created using a resiliently deformable material, a spring, or both. In

the disputed phrase “release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration,” “its bias” explains *why* the mouthpiece assembly would move from the stowed configuration to the dispensing configuration when released by the user. The specification provides examples of *how* that bias is created. Therefore, the specification language cited by Zak fails to create the ambiguity Zak describes.

Even assuming Zak’s reading of the specification is correct, the Court disagrees that the specification describing three possible embodiments of the mouthpiece assembly’s bias renders the claim indefinite. Under Zak’s reading, “its bias” would refer to whatever bias the mouthpiece assembly has in a given embodiment—be it internal, external, or both. But the term would not be indefinite simply because the specification provides the universe of possible biases the mouthpiece assembly can have and, in any event, the term “bias” has its own construction, as discussed below, that adds clarity to the disputed phrase.

The term “its bias” may lack an explicit antecedent basis, but it is clear in context that “its” refers to “mouthpiece assembly”—a point Zak conceded at the hearing—and “bias”—as used here—refers to the mouthpiece assembly’s predisposition to the dispensing configuration. Zak has not shown by clear and convincing evidence that a person of ordinary skill in the art would fail to understand the scope of this term.

CamelBak argues that this term should be given its plain and ordinary meaning, and the Court agrees. In context, and with the aid of the other terms separately construed herein, the phrase “release the mouthpiece assembly to move via its bias from the stowed

configuration to the dispensing configuration” is easily understood by lay judges and juries.

E. “a user release mechanism adapted to automatically disengage the first and second catch structures upon actuation of the user release mechanism and thereby release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration”		
’028, ’595, and ’879 Patents		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
plain and ordinary meaning	means-plus-function limitation	plain and ordinary meaning

Zak argues this claim must be limited to a means-plus-function construction under 35 U.S.C. § 112(f), which states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Section 112(f) permits patent drafters to claim an element as “means” or “steps” for performing a function without identifying any particular structure. However, the “price to be paid” for drafting under § 112(f) is the limitation of the claim to only those structures disclosed in the specification and their equivalents. *O.I. Corp. v. Tekmar Co., Inc.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997). In other words, § 112(f) allows a patent drafter to draft a claim more generically than otherwise allowed but limits the scope of that claim to only the example-embodiments described in the specification.

Normally, the clue that a claim has been drafted under § 112(f) is the use of the word “means” in the claim language. See *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015). There is a rebuttable presumption that claim terms without the

word “means” are not governed by § 112(f), but the presumption is not a strong one. *Id.* at 1349. “[T]he essential inquiry is not merely the presence or absence of the word ‘means’ but whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Id.* at 1348.

When the word “means” is not present, the drafter’s use of “[g]eneric terms such as ‘mechanism,’ ‘element,’ ‘device,’ and other nonce words that reflect nothing more than verbal constructs may be . . . tantamount to using the word ‘mean’ because they ‘typically do not connote sufficiently definite structure.’” *Id.* at 1350 (quoting *Mass. Inst. of Tech. & Elecs. for Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006)).

Zak argues that “user release mechanism” is a nonce phrase that is tantamount to using the word “means.” Zak further argues that “the remaining language—‘adapted to automatically disengage the first and second catch structures upon actuation of the user release mechanism . . .’—is merely functional because it gives no sense of what structure or form the claimed user release mechanism takes and only describes what the user release mechanism does.” (Doc. 65, p. 20).

Zak points to *Williamson*, where the Federal Circuit examined a patent for virtual learning software and held that § 112(f) applied to the term “distributed learning control module,” despite the term’s lack of the word “means.” 792 F.3d at 1351. The court found that “module” was a nonce word equivalent to using the word “means.” *Id.* at 1350. The court looked without success to the specification for insight as to how a “distributed learning control module” would interact with the patent’s other components “in a way that might inform the structural character of the limitation-in-question or otherwise impart structure.” *Id.* at 1351. While recognizing “that the presence of modifiers can change the

meaning of” a nonce word, the use of the prefix “distributed learning control” could not save the term because those “words do not describe a sufficiently definite structure.” *Id.*

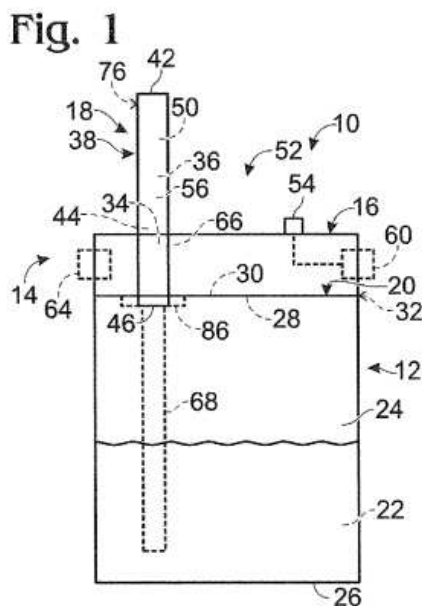
CamelBak argues that “user release mechanism” is not a nonce phrase because—while “mechanism” may be a nonce word on its own—“user release” modifies “mechanism” and connotes sufficient structure to a person of ordinary skill in the art for § 112(f) to not apply. CamelBak points to the structures described in the disputed claim language:

[A] *user release mechanism* adapted to automatically disengage *the first and second catch structures* upon actuation of the *user release mechanism* and thereby *release the mouthpiece assembly* to move via its bias from the *stowed configuration to the dispensing configuration*.

(Doc. 64-3, p. 18) (emphasis added). CamelBak argues that the word “user” implies a physical structure with which a user may interact. Moreover, the word “release” describes how the “mechanism” interacts with the other pieces of the physical structure: the “user release mechanism” must be a structure than can release the first and second catch structures to allow the mouthpiece to move to the dispensing configuration. CamelBak also argues that the figures and descriptions in the specification further elucidate the physical structure of the “user release mechanism.”

CamelBak relies on *Alex Is the Best, LLC v. BLU Products, Inc.*, where the district court found § 112(f) did not apply to the terms “optical module” and “image capturing module.” 2017 WL 5031638, at *7–8 (D. Del. Nov. 3, 2017). The court acknowledged that “module” is a nonce word that did not connote structure on its own but found that, in the context of digital photography equipment, the modifiers “optical” and “image capturing” made the terms’ structures sufficiently clear to a person of ordinary skill in the art. *Id.* The court adopted the plain and ordinary meaning of the terms. *Id.*

The Court finds that § 112(f) does not apply to “user release mechanism” and its accompanying claim language. This mechanism is not a generic placeholder in the context of the patents. Rather, it plays the structural role of allowing the user to release the mouthpiece from the catch structures, causing the mouthpiece to move to the dispensing position. And unlike the disputed term in *Williamson*, here the specification “inform[s] the structural character” of “user release mechanism.” 792 F.3d at 1351. For example, the figures in the '028 patent demonstrate how the “user release mechanism” 60 interacts with the catch structures 54 and 56 and the mouthpiece assembly 18:



(Doc. 64-3, pp. 4, 10).

Accordingly, the Court finds that, to a person of ordinary skill in the art, “user release mechanism” has “a sufficiently definite meaning as the name for structure,” *Williamson*, 792 F.3d at 1348, and Zak has failed to overcome the presumption against the application of § 112(f). The Court further finds that the meaning of the full phrase

a user release mechanism adapted to automatically disengage the first and second catch structures upon actuation of the user release mechanism and

thereby release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration

is clear in context. Apart from the terms in this phrase that are separately construed herein, the Court gives the phrase its plain and ordinary meaning.

F. “is biased” / “biases”		
’028, ’595, ’879 and ’833 Patents		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
“tends to return . . . absent an external force”	“is pushed, or force is exerted on, in a particular direction”	“returns . . . absent an external force”

Variations of the term “bias” appear in the patents in at least three contexts. First, the claims recite a mouthpiece assembly that “is biased to the dispensing configuration” and a crimping region that “at least partially biases the mouthpiece assembly to the dispensing configuration.” (Doc. 64-3, p. 18). CamelBak asserts that the mouthpiece assembly’s bias can be either internal—created by the material the mouthpiece assembly is made from—or external—created by a mechanism external to the mouthpiece assembly, such as a spring. The ’028 specification explains:

The bias of a mouthpiece assembly according to the present disclosure may be provided by the internal bias created by the material from which at least a portion of the mouthpiece assembly is constructed. For example, at least a portion of a mouthpiece assembly, such as crimping region 44, may be constructed of a resiliently deformable material. An illustrative, non-exclusive example of a suitable resiliently deformable material includes (but is not limited to) silicone. Additionally or alternatively, a biasing mechanism 50 may include at least one spring.

Id. at p. 10.

Second, the claims recite a bite-actuated mouthpiece that “is biased to the closed configuration.” *Id.* CamelBak asserts this bias is internal only. In other words, the mouthpiece is made from a material—such as silicone—that remains closed until the user bites down on it, at which point the slit in the mouthpiece opens and allows liquid to flow into the user’s mouth.

Third, the claims recite a sliding member that “is biased away from a position in which the sliding member releases the mouthpiece assembly to move from the stowed configuration to the dispensing configuration.” (Doc. 64-6, p. 18). CamelBak asserts this bias is external only.

CamelBak proposes the “bias” terms be construed to mean “tends to return . . . absent an external force.” For example, if this construction is inserted into the claim language, the claims would recite a mouthpiece assembly that “~~is biased~~ tends to return to the dispensing configuration absent an external force.” In this example, the first and second catch structures are the “external force” that restrain the mouthpiece assembly and prevent it from returning to the dispensing configuration. CamelBak contends that this construction gives the “bias” terms a consistent meaning throughout the patents and is applicable to both internal and external biases.

Zak proposes “is biased” should be construed to mean “is pushed, or force is exerted on, in a particular direction” and “biases” should be construed to mean “pushes or exerts force in a particular direction.” Zak contends that “the patents describe the biasing mechanism or biasing member as the part of the drink container that pushes or exerts force on another part to move it in a particular direction from one position or another position.” (Doc. 73, p. 3).

Zak argues CamelBak's proposed construction is wrong because it "focus[es] on the part of the drink container that is biased while ignoring how its catch-all construction applies to the part that biases" and the inclusion of an ellipsis makes CamelBak's "proposed construction impossible for the jury to understand." *Id.* at 4–5. CamelBak contends Zak's proposed construction is inappropriately limited to only external biases because it requires a "push" or "force" against the structure and that the construction is nonsensical when inserted into the claim language.

Both parties cite to district court cases construing variations of the term "bias" to support their proposed constructions. Zak relies on *Perfectvision Manufacturing, Inc. v. PPC Broadband, Inc.*, 2014 WL 4285786, at *4 (E.D. Ark. Aug. 29, 2014), where the district court construed "to bias" to mean "to exert force in a particular direction against an object." Zak also points to *Invisible Fence, Inc. v. Perimeter Technologies, Inc.*, 2006 WL 1443399, at *5 (N.D. Ind. May 25, 2006), where the district court construed the term "biasing"—a term found in the claim language, "a contactor having a spring located inside the battery holder between the base of the battery holder and the battery for biasing the battery toward the opening of the battery holder"—to mean "exerting force in a particular direction toward the open end of the battery holder."

CamelBak argues that the claim language in *Perfectvision* and *Invisible Fence* referenced external biases only and are thus inapplicable here. Instead, CamelBak relies on *Acantha LLC v. DePuy Synthes Sales, Inc.*, 2017 WL 972106, at *6 (E.D. Wis. Mar. 13, 2017), where the district court construed "biased" to mean "the tendency of a structure or component to return to a certain position or shape absent external force."

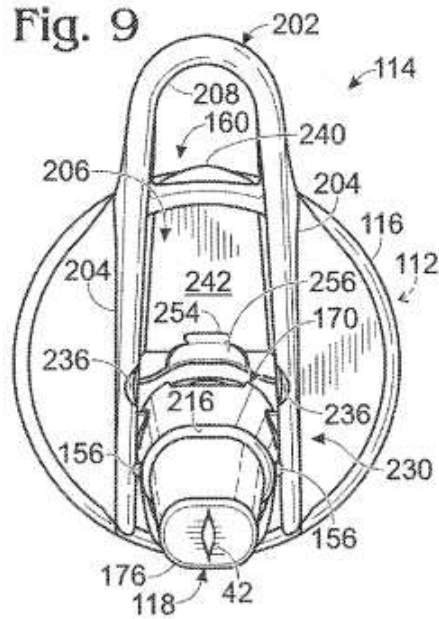
The Court finds Zak’s “is pushed, or force is exerted on” language fails to capture the full meaning of the “bias” terms. Zak’s language is a poor fit when used to refer to the mouthpiece assembly’s internal bias to the dispensing configuration, where nothing is pushing the mouthpiece assembly and the only force being exerted is the force generated by the material itself. Similarly, while Zak’s “in a particular direction” language has been used by other courts to construe variations of the term “bias,” the language is inartful in the context of these patents. The core of the “bias” terms is the predisposition of a part to a particular orientation, not necessarily the direction the part is moving in. CamelBak’s proposed construction—“tends to return . . . absent an external force”—better captures this meaning. Mr. Goldman confirms that this is how a person of ordinary skill in the art would have understood the claim language, attesting that, in his opinion, the “bias” terms mean, “tends to return to its default state, absent an external force.” (Doc. 64-7, ¶ 28). The Court finds the inclusion of an ellipsis in CamelBak’s construction, as a placeholder for a part’s specified default state, is appropriate and will be understandable by a jury.

However, Zak takes issue with CamelBak’s inclusion of the word “tends” in the phrase “tends to return,” and the Court agrees that CamelBak has not justified the word’s inclusion. While one dictionary definition of the word “bias” is “tendency,” *Bias*, The Merriam-Webster Dictionary (2022), the claim language and specification suggest that the parts are designed to *always* move to their default configuration absent an external force, *see, e.g.*, Doc. 65-3, p. 11 (“Bite-actuated valves . . . are typically biased to a closed configuration, and thus automatically return from an open configuration to a closed configuration upon release of the compression forces being applied thereto . . .”). So, rather than having a tendency to return, the parts simply return.

Accordingly, the Court construes the terms “is biased” and “biases” to mean “returns . . . absent an external force.”

G. “stowing region”		
'028, '595, and '879 Patents		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
plain and ordinary meaning	“the space on the cap assembly that is sized for storing at least a portion of the mouthpiece assembly”	plain and ordinary meaning

The term “stowing region” appears in the '028, '595, and '879 patents. For example, claim 1 of the '879 patent recites that “the cap assembly defines a stowing region sized to receive at least a portion of the mouthpiece assembly when the mouthpiece assembly is in the stowed configuration.” (Doc. 64-5, p. 18). Claim 6 of the '028 patent recites that “the cap assembly further includes a handle that projects away from the base of the cap assembly and a pair of lateral guards that at least partially define a stowing region that receives at least a portion of the mouthpiece assembly.” (Doc. 64-3, p. 18). A possible embodiment of the “stowing region” 206 and “mouthpiece assembly” 118 is shown in figure 9 of the '028 patent:



Id. at p. 6.

Zak argues “stowing region” should be defined as “the space on the cap assembly that is sized for storing at least a portion of the mouthpiece assembly.” In other words, Zak contends the “stowing region” is limited to *only* the area on the cap assembly where the mouthpiece assembly is stored and does not extend outside the space needed for that purpose. Zak points to the figures in the specification to support this construction.

CamelBak argues “stowing region” is a self-explanatory term that requires no construction. CamelBak further argues that Zak’s construction improperly replaces “region” with “space” and “stowing” with “storing” and adds redundant language already present in the claims.

The Court finds that “stowing region” should be given its plain and ordinary meaning. First, CamelBak is correct that Zak’s construction would substitute the claim language for similar words and would include redundant language. Second, Zak’s construction would limit the claims based on the *possible* embodiments shown in the specification, but the Federal Circuit “has cautioned against limiting the claimed invention

to preferred embodiments or specific examples in the specification.” *Vulcan Eng’g Co. v. Fata Aluminium, Inc.*, 278 F.3d 1366, 1376 (Fed. Cir. 2002) (quoting *Texas Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 805 F.2d 1558, 1563 (Fed. Cir. 1986)). The claim language limits the scope of the “stowing region” to an area defined by the cap assembly and a pair of lateral guards that is large enough to stow a portion of the mouthpiece assembly when in the stowed configuration, but the language does not say the region must be *no larger* than the mouthpiece assembly. Zak’s contentions as to the scope of the “stowing region” are resolved by the claim language, and the term requires no construction by the Court.

H. “automatically”		
’028, ’595, and ’879 Patents		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
“without additional human intervention”	“without additional action by the user after actuation of the user release mechanism”	“without additional human intervention”

The term “automatically” appears in conjunction with the user release mechanism’s ability, when pressed by the user, to release the mouthpiece assembly from the stowed configuration. For example, claim 1 of the ’028 patent recites “a user release mechanism adapted to automatically disengage the first and second catch structures upon actuation of the user release mechanism and thereby release the mouthpiece assembly to move via its bias from the stowed configuration to the dispensing configuration.” (Doc. 65-3, p. 18). The ’028 specification states that “[i]n some examples, the mouthpiece assembly is

biased toward the dispensing configuration and thus moves automatically under its bias upon release by the user-release mechanism.” *Id.* at p. 8.

CamelBak argues “automatically” means “without additional human intervention” because the claim language and specification show that the user release mechanism “automatically” releases the mouthpiece assembly only after the user actuates it.

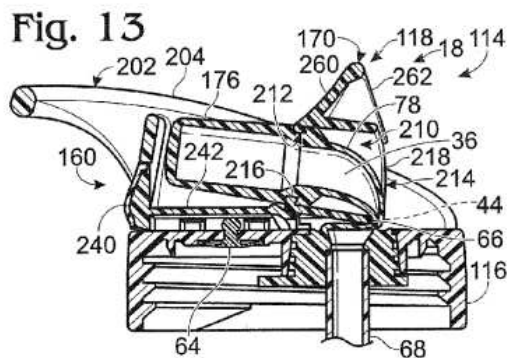
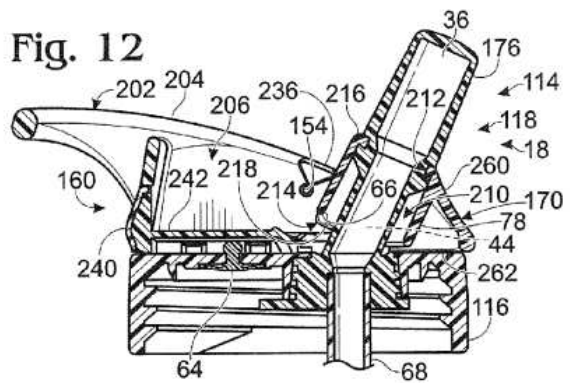
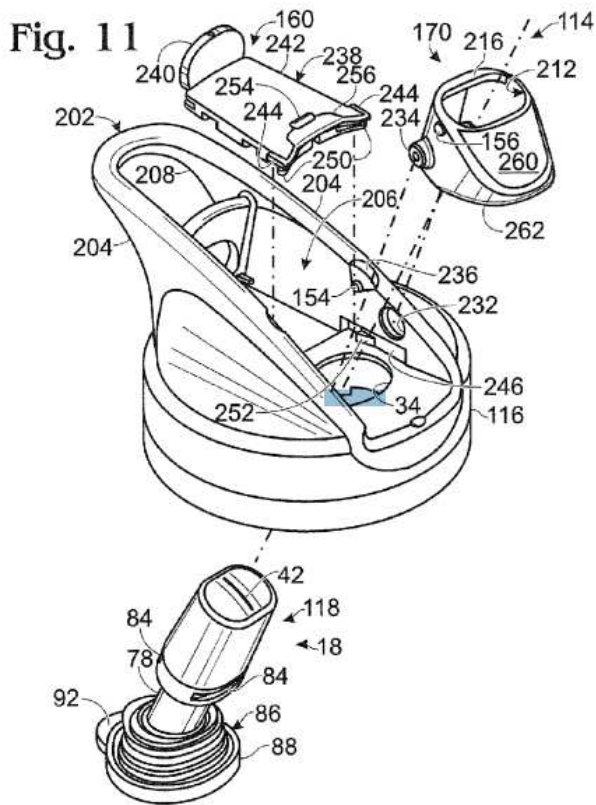
Zak initially proposed to construe “automatically” as “without action by the user,” arguing the word “additional” is not necessary because other claim language recites the action required by the user. Nevertheless, Zak now offers a compromise construction of “without additional action by the user after actuation of the user release mechanism.” So, Zak’s compromise resolves the parties’ primary dispute, which was over the word “additional.” However, Zak maintains that if “additional” is included, then “after actuation of the user release mechanism” must also be included; CamelBak objects, pointing out that the latter phrase would be redundant of the surrounding claim language.

The Court agrees with CamelBak. In this context, “automatically” means that the user release mechanism performs the described function without requiring any further manual manipulation by the user beyond what is already described in the claim language. CamelBak’s straightforward construction—“without additional human intervention”—captures this meaning. Zak has agreed to the inclusion of the word “additional,” and the intrinsic evidence supports Zak’s concession. “Automatically” cannot mean without *any* human intervention because the claim language requires that the user first actuate the user release mechanism. *See CollegeNet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1235 (Fed. Cir. 2005) (affirming the district court’s construction of “automatically” as “once initiated, the function is performed by a machine, without the need for manually

performing the function”). But full adoption of Zak’s compromise construction would create an unnecessary and confusing redundancy in the definition of “automatically” by inserting a limitation—“after actuation of the user release mechanism”—that already exists in the claim language. Accordingly, the Court construes “automatically” to mean “without additional human intervention.”

I. “user engagement pad . . . which extends through the sidewall of the base of the cap assembly” / “user engagement pad that extends through a wall of the cap assembly” / “user engagement pad extends through a wall of the cap assembly”		
’028, ’595, and ’833 Patents		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
plain and ordinary meaning	“user engagement pad . . . which extends from one side to the other side of an opening that is surrounded by the sidewall of the base of the cap assembly”	plain and ordinary meaning

These terms involve the scope of the “user engagement pad,” which is the area of the user release mechanism that the user presses (or otherwise interacts with) to release the mouthpiece from the stowed configuration. Claim 3 of the ’028 patent recites that “the user release mechanism further includes a user engagement pad that is coupled to the sliding member and which extends through the sidewall of the base of the cap assembly for selective engagement by the user.” The same or similar claim language is present elsewhere in the ’028 patent and the ’595 and ’833 patents. The “user engagement pad” 240, the “user release mechanism” 160, the “sliding member” 238, and the “base of the cap assembly” 116 are exemplified in figures 11, 12, and 13 of the ’028 patent:



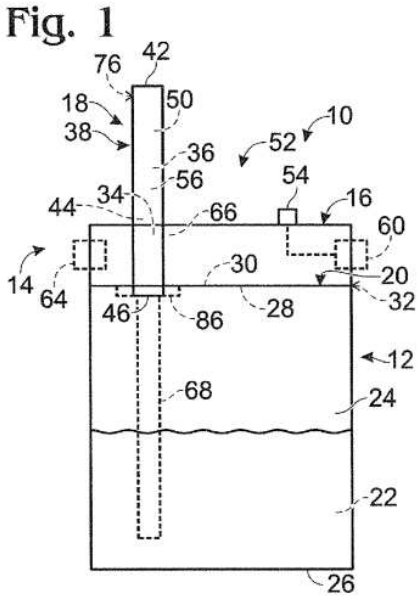
(Doc. 64-3, p. 7).

Zak argues that because the “user engagement pad” phrases are not discussed in the specification, the Court must turn to the figures to understand their meaning. According to Zak, the figures show that the “user engagement pad” must extend from one side to the other side of an opening that is surrounded by the sidewall of the base of the cap assembly. Zak contends that giving these phrases their plain and ordinary meaning, as CamelBak proposes, would improperly allow CamelBak to claim an invention that is broader than what CamelBak actually invented with the patents. CamelBak argues that Zak’s construction injects limitations not present in the claim language by substituting “from one side to the other side” for “through” and requiring the sidewall “surround” the opening.

The Court finds the “user engagement pad” phrases should be given their plain and ordinary meaning and require no construction by the Court. The Court declines to construe these phrases using Zak’s description of the specification figures. Such a construction would improperly limit the claim language by using only the embodiment in the specification figures. *See Vulcan Eng’g*, 278 F.3d at 1376. Certainly, one embodiment of CamelBak’s patents might include a user engagement pad that “extends from one side to the other side of an opening that is surrounded by the sidewall of the base of the cap assembly,” but the claim language itself is not limited to that embodiment. Rather, the “user engagement pad” must extend through the wall of the base of the cap assembly so that the user can interact with the “user release mechanism.” This *may* be accomplished by having the “user release mechanism” protrude through an enclosed opening that is the same size as the “user release mechanism,” but this is not the only embodiment contemplated by the claim language. Accordingly, there remains no genuine dispute as to the scope of the plain language of these terms, and they require no construction by the Court.

J. “the anchor portion is sized to restrict passage of the anchor portion through the through passage”		
’028, ’595, and ’879 Patents		
CamelBak’s Proposed Construction	Zak’s Proposed Construction	Court’s Construction
plain and ordinary meaning	“the anchor portion is sized such that at least a part of the anchor portion is too large to fit into the through-passage and no part of the anchor portion may pass into one end of the through-passage and out of the opposite end of the through-passage”	plain and ordinary meaning

A representation of this claim phrase appears in claim 1 of the ’028 patent, which recites “an anchor portion extending from the tube distal the mouthpiece portion, wherein the anchor portion is sized to restrict passage of the anchor portion through the through passage of the base of the cap assembly.” (Doc. 64-3, p. 18). The ’028 patent’s specification further provides that “the mouthpiece assembly may include an anchor, or anchor portion, 86 that is adapted to prevent, or at least restrict, passing of the anchor portion through the through-passage of the base of the cap assembly.” *Id.* at p. 12. The “anchor portion” 86 and “through passage” 34 are exemplified in figure 1 of the ’028 patent:



Id. at p. 4.

Zak argues this claim phrase must be construed to mean that the “anchor portion” must be sized so that part of it is too big to fit into the through passage and none of it can fit *all the way* through the through passage. Zak insists this construction comes directly from the successful arguments CamelBak made to the Patent Trial and Appeal Board (“PTAB”) and that CamelBak must be held to those arguments.

CamelBak argues it has not abandoned its arguments to the PTAB and that, contrary to Zak’s proposed construction, the patents explicitly distinguish between *restricting* passage through the through passage and *preventing* passage through the through passage. CamelBak writes that “Zak’s proposed construction fails because it limits the scope of the claim to the unclaimed preventing embodiment and excludes the claimed restricting embodiment.” (Doc. 65, p. 28).

Zak directs the Court to the relevant prosecution history. The patent examiner initially rejected certain claims of the ’028 patent due to prior art. Specifically, the examiner found that a prior drink container patent disclosed a mouthpiece portion with an anchor

portion. *Ex Parte Jeff Davies & Derek Gavin Sullivan*, 2017 WL 1032223, at *2 (P.T.A.B. Mar. 15, 2017). The examiner found CamelBak's limitation in claims 1 and 21 that the anchor portion be "sized to restrict passage of the anchor portion through the through passage" failed to distinguish CamelBak's invention from the prior art because "as long as the anchor portion has a size, it is capable of restricting passage." *Id.* CamelBak appealed the examiner's decision to the PTAB, which reversed the examiner's decision. *Id.* at *3. The PTAB found that CamelBak's "sized to restrict" language "positively limits the structure of the claims to a structure in which an anchor portion has a size that functionally acts to restrict, or limit, passage of the anchor portion through the claimed through-passage," and this limitation was not present in the prior art the examiner relied on. *Id.* Adopting CamelBak's argument, the PTAB explained that the examiner's findings were "unreasonable" because "[e]very structure has a size, but not all structures are capable of performing the claimed functional requirement of restricting passage of the anchor portion through the through-passage of the base of the cap assembly." *Id.* (emphasis in original). The PTAB further explained that "as [CamelBak] correctly note[s], for example, an anchor portion that is *smaller* than the through-passage will not function to restrict passage therethrough." *Id.* (emphasis in original).

The PTAB also reversed the examiner's rejection of claim 18 of the '028 patent, which does not recite the disputed claim phrase but instead recites an anchor portion having "a plurality of flanges that are sized and shaped to provide a friction-fit arrangement with the through-passage and to restrict passage of the anchor portion through the through-passage." *Id.* at *4. The examiner found that a prior patent, Choi, disclosed an anchor portion and another patent, Lin, disclosed flanges. The examiner

found that “that it would have been obvious to incorporate Lin's flanges into Choi’s anchor portion to prevent leakage.” *Id.* The PTAB reversed this finding, explaining:

We agree with Appellants. As discussed above, Choi does not disclose an anchor portion as claimed. Lin does not remedy this defect because, although Lin teaches a plurality of flanges, Lin does not teach flanges that restrict passage of an anchor portion through a through-passage. Indeed, Lin's lower flange is expressly configured *to permit* passage through the through-passage. Further, the Examiner’s purported reasoning for incorporating Lin's flanges into Choi’s structure lacks rational underpinning, as Choi does not articulate a “leakage” problem, and Lin does not associate the prevention of leakage with the inclusion of flanges.

Id. (emphasis in original) (citations omitted).

Zak contends its proposed construction is appropriate because “[t]he PTAB accepted CamelBak’s arguments that the relative size of the anchor portion and the through-passage is essential to the meaning of this claim phrase” and “that no part of the anchor portion (such as the lower flange in Lin) may pass into one end of the through-passage and out of the opposite end of the through-passage in order to meet the ‘restrict passage of the anchor portion through the through-passage’ limitation.” (Doc. 65, pp. 10–12). Zak also points to the specification figures to support its proposed construction.

The Court finds Zak’s proposed construction misconstrues the prosecution history and would inappropriately limit the claim phrase to embodiments not dictated by the claim language. While Zak purports to be pulling its construction from CamelBak’s successful arguments to the PTAB, CamelBak did not argue that its claimed “anchor portion” must be sized so that part of it is too big to fit into the through passage and none of it can fit all the way through the through passage. Instead, CamelBak argued, and the PTAB agreed, that its “sized to restrict passage” claims were patentable because the claims required the anchor portion be at least as big as the through passage; otherwise, the passage of

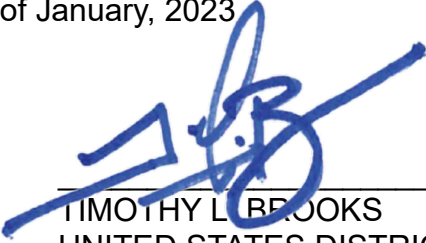
the anchor portion through the through passage would not be restricted. This does not require the anchor portion to be *larger* than the through passage so that the anchor portion's passage through the through passage is *prevented*. Support for this interpretation is found in the specification, which states that the anchor portion "is adapted to prevent, or at least restrict, passing of the anchor portion through the through-passage of the base of the cap assembly," differentiating between "prevent" and "restrict." (Doc. 64-3, p. 12). As for claim 18 of the '028 patent, none of CamelBak's arguments nor the PTAB's reasoning—which was simply that the prior art did not include CamelBak's "plurality of flanges" that would restrict passage through the through passage—require an anchor portion sized to prevent passage through the through passage.

The meaning of the disputed claim phrase is simply its plain and ordinary meaning—that the anchor portion is of such a size that its passage through the through passage is restricted. Mr. Goldman persuasively attests that a person of ordinary skill in the art would understand this plain meaning. (Doc. 64-7, pp. 15–16). Accordingly, the Court finds that the claim phrase "the anchor portion is sized to restrict passage of the anchor portion through the through passage" requires no construction and is given its plain and ordinary meaning.

V. CONCLUSION

The Court **HEREBY ADOPTS** the above constructions for the claim terms identified by the parties.

IT IS SO ORDERED on this 9th day of January, 2023



TIMOTHY L. BROOKS
UNITED STATES DISTRICT JUDGE