

United States District Court,
N.D. California, San Jose Division.

AQUA-LUNG AMERICA, INC,
Plaintiff.

v.
AMERICAN UNDERWATER PRODUCTS, INC., et al,
Defendants.

No. C 07-2346 RS

Feb. 26, 2009.

A. James Isbester, Townsend and Townsend and Crew LLP, San Francisco, CA, Andrew J. Patch, Douglas V. Rigler, Young and Thompson, Alexandria, VA, Gillian Winifred Thackray, Isbester & Thackray LLP, Berkeley, CA, Jeffrey Michael Goehring, Young & Thompson, Arlington, VA, for Plaintiff.

Joel A. Kauth, Kauth, Pomeroy, Peck & Bailey LLP, Irvine, CA, for Defendants.

ORDER CONSTRUING CLAIMS

RICHARD SEEBORG, United States Magistrate Judge.

I. INTRODUCTION

This case involves a built-in device for scuba equipment intended to keep water out of a regulator even if the diver forgets to replace the dust cap after use. On December 10, 2008, a hearing was held for the purpose of construing ten disputed terms in the claims of United States Patent Nos. 6,601,609 ("the '609 patent"), 6,901,958 ("the '958 patent"), and 7,185,674 ("the '674 patent"). FN1 The three patents-in-suit stem from a common original application, United States Patent Application No. 09/872,130 ("the '130 application"), filed June 1, 2001.

FN1. While this action was filed before the adoption of the 2008 Patent Local Rules, the Court requested that the parties follow the procedures set forth in Patent L.R. 4-1(b) providing for the construction of up to ten terms likely to be the most significant in resolving the dispute. The present analysis will treat only the ten terms set forth in the Joint Claim Construction Chart submitted to the Court.

The specifications of the first two patents are effectively the same while the '674 patent, as a continuation-in-part patent, has added descriptions. The patents, therefore, are similar but use different claim language. Declaratory relief plaintiff Aqua-Lung America, Inc. ("Aqua-Lung"), the alleged infringer, maintains that the patents-in-suit claim the same structure using an ever-changing variety of names that are intended to be incrementally broader and cover more subject matter than the inventor of the patents-in-suit actually

invented. The patent holders, defendants and counter-claimants American Underwater Products, Inc. and Two Forty Deuce Corporation (collectively "Two Forty"), respond that the scope of the claims are fully supported by the original patent application. After consideration of the arguments, the evidence submitted, and the relevant portions of the record, the Court construes the ten disputed claim terms as set forth below.

II. LEGAL STANDARD

Claim construction is a question of law to be decided by the Court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995). Claim construction begins with the language of the claims themselves. *Z4 Technologies, Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1348 (Fed.Cir.2007). Claim language generally carries the meaning as normally used in the field, as it is understood by a person of ordinary skill in the art at the time of the invention. *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1367 (Fed.Cir.2003). "The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed.Cir.2005).

The intrinsic record (the claims, specification, and if applicable, the prosecution history) provides the context enabling a court to ascertain the meaning of the claim to one of ordinary skill in the art. *Id.* The definition found in the specification is the best guide to the meaning of a disputed term, *id.* at 1315, because the patentee can assign terms a definition that is unique from its ordinary meaning. *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1381 (Fed.Cir.2008); *see Phillips*, 415 F.3d at 1316 ("[A] special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess ... [is governed by] the inventor's lexicography").

As the Federal Circuit has made clear:

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to this claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed.Cir.1998) (citations omitted). FN2

FN2. For purposes of determining one skilled in the art, Two Forty represented that each of the asserted claims in at least two of the patents-in-suit were entitled to a priority date of June 1, 2001, as Aqua-Lung similarly contends. Two Forty believes that this priority date should also apply to the '674 patent, and therefore, all three patents-in-suit. In the alternative, Two Forty maintains that the '674 patent should have a February 2002 priority date. The end result, according to Two Forty, is that a person of ordinary skill in the art in the scuba industry in June 2001 or February 2002 would have at least four years experience in repairing, designing, or manufacturing scuba regulator devices. Aqua-Lung does not advance an alternative definition.

The eight month difference in priority dates for determining one skilled in the art does not seem to be significant here as both parties briefly glossed over the issue in their briefs. The parties have not submitted extrinsic evidence indicating that either date makes a difference for the understanding of one of skilled in the art. Indeed, this most likely is due to the fact that presenting evidence from one of ordinary skill level is more applicable in connection with the issue of obviousness, which is beyond the scope of this order.

Janssen Pharmaceutica N.V. v. Mylan Pharms., Inc., 456 F.Supp.2d 644, 652-654 (D.N.J.2006). Regardless of what priority date ultimately is employed, the '130 application as filed on that date, represents a major component of the intrinsic record.

III. DISCUSSION

1. *Housing*

The term "housing" appears in the claims of the '130 application and in all three of the patents-in-suit. *See* '130 application claim 1 at 35 ("a housing defining a central passageway having fluid inlet and fluid outlet openings"); '609 patent claim 5 at 20:8-15 ("a *housing* defining an internal passageway having a gas inlet opening near an upstream end of said *housing*, and a gas outlet opening spaced from said gas inlet opening, said *housing* having a first attachment portion configured for connection of an upstream end of said filter assembly to a pressurized source of breathable gas and a second attachment portion configured for connection of a downstream end of said filter assembly to said regulator device") (emphasis added); '958 patent claim 8 at 18:49-54 ("a *housing* defining a duct with gas inlet and gas outlet openings defined at opposite ends of said duct, said *housing* having a valve sealing face disposed near said gas inlet opening and adapted for engagement with said high-pressure gas source") (emphasis added); '674 patent claim 1 at 26:45 ("a housing including a bore"); *see also* '130 application claim 13 at 37, claim 21 at 40, claim 29 at 43, claim 38 at 45, claim 51 at 49; '609 patent claim 1 at 17:55-59; '958 patent claim 1 at 17:62-67; '674 patent claim 13 at 27:24-35.

Aqua-Lung proposes that "housing" be construed as "a structure with internal space that defines the internal passageway" while Two Forty counters with "the body or skeletal portion of the device." Based on a reading of the claim language above, Aqua-Lung's proposed construction is too narrow as not every claim includes an "internal passageway." That portion of its proposed definition, therefore, should not be included in the final construction.

That said, Two Forty's proposed construction is too broad as it fails to take into account the internal space associated with the "housing" claims above. A review of the specifications in the '609 and '958 patents further clarifies that a "housing" surrounds an internal space. The specifications in the '609 and '958 patents contain identical references to the term: (1) "the housing 34 includes a gas inlet opening 38 which is surrounded by a raised collar or flange 40"; (2) "a housing 62 having a top or inlet end 64, a central shaft 65 and a bottom or outlet end 66"; (3) "[t]he housing 62 of this embodiment includes the upper or inlet end portion 64, an bottom or outlet end portion 66, a central bore 78, an annular inner lip 82 forming a narrowed end opening 80, and an exit opening 116"; and (4) "[t]he housing 230 includes an inlet end portion 232 and an outlet end portion 234." '609 patent at 7:37-39, 8:49-50, 10:51:54, 14:44-45; '958 patent at 7:45-47, 8:57-58, 10:59-62, 14:52-53.

Any remaining doubt that a definition of "housing" should refer to an internal space is debunked by the abstract and the summary of the '130 application which provides that "a fluid flow control valve is disclosed. This valve includes a *housing* which defines a central passageway having fluid inlet and fluid outlet openings." '130 application at 7, 53 (emphasis added); *see also* '609 patent summary at 4:2-4; '958 patent summary at 4:9-12. These additional examples make clear that the "housing" as used in the claims noted above, defines an internal space. Based on the foregoing, the Court construes "housing" as "a structure surrounding an internal space."

2. *Passageway*

The intrinsic record reveals that the term "passageway" was never used in the '130 application by itself. Instead, the foundational term that is found in the summary of the invention and in numerous claims is "central passageway." *See* '130 application summary at 7 and claim 1 at 35 ("a housing which defines a central passageway having fluid inlet and fluid outlet openings"). The patents that followed contain the additional term "internal passageway" along with "central passageway." *See* '609 patent summary 4:2-4 ("a housing which defines a central passageway having fluid inlet and fluid outlet openings"); '958 patent claim 1 at 17:62-64 ("a housing defining an internal passageway having a gas inlet opening near an upstream end of said housing, and a gas outlet opening spaced from said gas inlet opening"); *see also* '674 patent claim 13 at 27:31-35.

Two Forty acknowledges that there is different terminology used in the patents such as "central passageway" and "internal passageway." Two Forty proposes that the Court define "passageway" by itself, as it is the structural element, and any adjective placed before it can be dealt with by the jury. The jury, for example, can plug in the definition of "passageway" regardless of whether it is preceded by "internal" or "central." The Court agrees, and therefore, will only define the major structural portion.

Aqua-Lung proposes that "passageway" be defined as "a conduit formed in the housing that leads gas through the housing and which is filled with pressurized gas when the housing is connected to a source of gas." Two Forty proposes that it be construed as "a path in the device."

Aqua-Lung's proposed definition attempts to add in extraneous limitations, which are found nowhere in the representative claims set forth above or the illustrative embodiments. Neither the identified claim language nor any of the claims appear to include any limitation regarding the "passageway" being filled with pressurized gas, or the passageway leading gas through the housing. The intrinsic record reveals that the conduit is a fixed thing, which cannot actively lead anything. That is, it is a fixed structure and gas may or may not flow through it. Said another way, the claim is directed at a defined structure, and not any contents that may or may not be in the passageway at any given time. Any resulting construction, therefore, cannot include any extraneous portion of Aqua-Lung's proposed definition detailing: (1) any leading of "gas through the housing"; and (2) the conduit being "filled with pressurized gas when the housing is connected to a source of gas."

This leaves the Court with Two Forty's self-styled simplistic proposed definition and the first portion of Aqua-Lung's proposed definition of the term "passageway." In some cases, the ordinary meaning of a claim by one of ordinary skill in the art may be readily apparent even to lay judges. *Phillips*, 415 F.3d at 1314. In such a case, claim construction involves nothing more than the application of the widely accepted meaning of the commonly understood words through the use of a general purpose dictionary used in conjunction with the intrinsic evidence. *Id.* In *Brown v. 3M*, 265 F.3d 1349, 1352 (Fed.Cir.2001), for example, the word "or" was construed to mean that the apparatus was capable of converting "only two-digit, only three-digit, only four-digit, or any combination of two-, three-, and four-digit date-data." The Federal Circuit held that was a correct plain reading of the claim text and it did not constitute a technical term of art requiring elaborate interpretation. *Id.*

At the hearing, Two Forty acknowledged that its proposed definition, while comporting with the plain meaning of a simple term, might be overbroad. Accordingly, they proposed a modified definition of "passageway" as "a conduit formed in the housing that allows gas through it." This definition incorporates the remaining first part of Aqua-Lung's proposed definition and excludes the extraneous second part described above. In light of this amended definition, and based on the foregoing, the Court adopts Two

Forty's amended construction of "passageway" as "a conduit formed in the housing that allows gas to pass through it."

3. Bore

While the term "bore" appears throughout the specifications, it does not appear in the claims of either the '609 patent or the '958 patent. The term first appears as a claim element in the '674 patent. *See* '674 patent claim 1 at 26:45 ("a housing including a bore"), claim 13 at 27:27-29 ("a first stage regulator comprising: a housing; and a gas inlet opening located within a bore in the housing"); *see also* *id.*, claim 1 at 26:46, 50, claim 13 at 27:40-41.

Aqua-Lung proposes two different definitions for the term "bore": (1) in claims one through twelve of the '674 patent, "an internal passageway that is cylindrical"; and (2) in claims thirteen through twenty-four of the '674 patent, "a threaded opening to a first stage regulator housing where the fluid flow control valve is connected." Two Forty proposes that the term be defined as "a hole or passage."

Aqua-Lung maintains that the '674 patent uses the term "bore" as a special definition given to "passageway" by the patentee that differs from the meaning it would otherwise possess. It contends that two different meanings of "bore" are needed because the '674 patent refers to two different things. In claims one through twelve, "bore" is being used as an alternative to "passageway" while in claims thirteen through twenty-four it is being used as the downstream connection point to the regulator. According to Aqua-Lung, while "passageway" in the first instance is referred to as a "bore," it does not cease being a "passageway." In the context of the individual embodiments, "passageway" is called a "bore," thereby suggesting that the latter is at least not narrower than the former. The end result, according to Aqua-Lung, is that once "passageway" is defined, then "bore" essentially must be defined accordingly.

Two Forty counters that their simple meaning of "bore" is based on the various uses of the structure in the patents. Like Aqua-Lung, Two Forty explains that "bore" is used in two different pieces of the invention. The first is the smaller insert portion of the opening hole in the connection point of the regulator. The second arises in the larger regulator in which the smaller insert is placed. According to Two Forty, regardless of what part is at issue, these two different pieces contain a "bore" that is used consistently in the patent as a hole. Two Forty contends that there just is no need to have two definitions for the same term especially when the different embodiments encompass a consistent element. The embodiments show a hole in an otherwise solid piece, whether it be in the larger or smaller insert. Two Forty, therefore, submitted a dictionary definition of the term "bore," arguing that a person of ordinary skill in the art would understand the term to mean a hole in the housing.

As noted above, the intrinsic record assists in ascertaining the meaning of "bore" to one of ordinary skill in the art because the definition found in the specification is the best guide to the meaning of the term. Phillips, 415 F.3d at 1315. A representative portion from the specification of the '609 patent states that: "The housing shaft 65 includes a threaded portion 68 which is designed to engage a *bore* 69 (FIG.14) disposed within the first stage regulator housing 34." 8:54-56 (emphasis added). A representative sample of "bore" in the '958 patent provides that: "the inlet valve 60 is illustrated in a closed position wherein the upper curved surface 94 of the piston 90 is in firm contact with the annular lip 82 so as to seal the opening 80 to the *bore* 78." 9:64-67 (emphasis added).

Indeed, a review of the embodiments accompanying the specification reveals that a "bore" is portrayed as a

circular opening or hole in the housing of two different pieces. Similarly in the specification of the '674 patent, embodiments show a first stage regulator housing with a circular hole and a smaller device with a circular opening. *See* 10:62-64 ("[t]he housing shaft 65 includes a threaded portion 68 which is designed to engage a *bore* 69 (FIG.14) disposed within the first stage regulator housing 34") (emphasis added); 12:8-10 ("In this closed position, neither fluid, liquid nor particulate matter of any kind can pass into the *bore* 78 through the inlet 80.") (emphasis added).

The intrinsic record, therefore, does not support two different meanings of the term "bore." Two Forty's suggested construction is more amenable to one skilled in the art. It accurately describes "bore" in all instances of use, whether in the '609, '958, or '674 patents. Nor does the '674 patent by itself indicate a separate meaning for "bore." At least for claims one through twelve of the '674 patent, Aqua-Lung's proposed definition of "an internal passageway that is cylindrical" does not sound that much different than Two Forty's proposed definition of "a hole or passage." Two Forty's proposed definition, however, lacks the "cylindrical" qualifying element that Aqua-Lung proposed and is present in the embodiments. At the hearing, both sides agreed that the term "bore" does bring in this cylindrical concept. Any definition, therefore, must include that defining aspect.

In short, there may be different uses of "bore" in the claims of the '674 patent, but at base the meaning remains the same. Said another way, the Court cannot import limitations from specific embodiments where "bore" is used in multiple contexts. The fact remains that whether "bore" is a cylindrical hole in the regulator or a cylindrical hole in the insert piece, it remains a cylindrical hole. Based on the foregoing, the Court construes "bore" to mean "a cylindrical hole or passage."

4. Duct

"Duct" appears at least forty five times in the claims of the '130 application, thirty-one times in the claims of the '609 patent, and six times in the claims of the '958 patent. *See* '130 application claim 21 at 40 ("a housing defining a central duct with gas inlet and outlet openings defined at opposite ends thereof"); '609 patent claim 37 at 23:34-35 ("a valve housing defining a tubular interior duct having gas inlet and gas outlet apertures at opposite ends thereof"), '958 patent claim 8 at 18:50-51 ("a housing defining a duct with gas inlet and gas outlet openings defined at opposite ends of said duct"); *see also* '130 application claim 38 at 45; '609 patent claim 1 at 17:55-56, 17:60-67, 18:5-9, claim 18 at 21:15-16, 21:21-27, 21:27-30, claim 37 at 23:36-45, 23:54-56; '958 patent claim 8 at 18:57-59; 18:63-64. The term does not appear in the claims of the '674 patent.

Aqua-Lung seeks to have "duct" defined as "a conduit formed in the housing that leads gas through the housing and which is filled with pressurized gas when the housing is connected to a source of gas." This is the same definition it proposed for "passageway." Two Forty proposes that "duct" be defined as "a passage or channel."

Aqua-Lung argues that "duct" is the same as "passageway." The hearing helped shed some light on the scope of "duct" compared to "passageway" and "bore." Two Forty acknowledged that "bore" was the broadest of the three terms because it connoted a hole, while passageway was more of a path. For "duct," however, Two Forty contended that it was similar to "passageway." Comparing the claims presented above with the claims for "passageway" reveals that the two terms are similar in that "duct" does appear to stand in the stead of "passageway" in certain claims.

Interestingly, the term "duct" does not appear in the specification of the '130 application or any of the patents-in-suit outside of the claims. Nonetheless, looking at the embodiments and seeing how "passageway" was used in the specification leads to the conclusion that "duct" and "passageway" refer to the same disclosed structure. A person skilled in the art would look at the embodiments and interpret "duct" in no other way. While the patentee selected different names to refer to the same structure, the coverage of the patents cannot be expanded on that basis alone. Doing so would expand the coverage beyond what the patentee invented. Based on the intrinsic record, the Court will adopt the same definition for "duct" that it did for "passageway," and therefore construes the term to mean "a conduit formed in the housing that allows gas to pass through it ."

5. Retainer Device

As an initial matter, Aqua-Lung maintains that the term "retainer device" invokes means-plus-function analysis. 35 U.S.C. s. 112(6). To determine whether a term should be so construed, the first step is to determine if the word "means" is used as its presence creates a presumption that 35 U.S.C. s. 112(6) applies. *Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344, 1353 (Fed.Cir.2006). When a claim does not use the term "means," as is the case here, treatment as a means-plus-function claim element generally is not appropriate. *Id.* Means-plus-function claims only go to purely functional limitations that do not provide the underlying structure performing the function. *Phillips*, 415 F.3d at 1311. For example, in *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed.Cir.1996), the court construed "detent mechanism" to refer to particular structure, even though the term had functional connotations.

That said, "a limitation lacking the term 'means' may overcome the presumption against means-plus-function treatment if it is shown that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." *Mass. Inst. of Tech.*, 462 F.3d at 1353 (quotation omitted). Generic terms such as "mechanism," "means," "element," and "device," typically do not connote sufficiently definite structure. *Id.* at 1354. In *Personalized Media Comm'n's, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 704 (Fed.Cir.1998), for instance, the Federal Circuit contrasted the term "digital detector" as a whole, which recited sufficient structure to avoid 35 U.S.C. s. 112(6) with "detector" by itself and other generic structural terms such as "means," "element," and "device," which did not.

Under this framework, Aqua-Lung submits that the use of the term "device" in "retainer device" is generic and invokes mean-plus-function analysis. Two Forty contends that adding the term "retainer" recites adequate structure and thereby does not implicate 35 U.S.C. s. 112(6). While the term "device" standing alone connotes no more structure than the term "means," the addition of "retainer" takes this claim outside the means-plus-function realm because claim language that further defines a generic term like "device" can add sufficient structure to avoid Section 112(6). *Mass. Inst. of Tech.*, 462 F.3d at 1354.

Use of the term in the '130 application and the '609 patent characterizes "retainer device" as something that secures the filter within the housing, thereby importing sufficient structure. *See* '130 application claim 12 at 37 ("said filter element is disposed between said bias exerting mechanism and said retainer device proximate said outlet opening"); '609 patent claim 15 at 20:65-67 ("retainer device disposed within said passageway and configured to removably secure said filter within said passageway"); *see also* '130 application claim 1 at 35, claim 13 at 38, claim 21 at 40. The specifications likewise make clear that the term "retainer" refers to a particular device (a c-clip) and is not simply a general description of any structure that will perform a particular function. *See id.* at 26 ("A c-clip 86 is utilized to maintain the position of all the aforementioned components within the bore 210."); '609 patent at 7:42 ("A C-clip 44 is utilized to hold the filter 42 in the

opening 38.").

Lest there be any doubt that 35 U.S.C. s. 112(6) does not apply, the Federal Circuit has presented numerous examples that are similar to the term "retainer device" where claim language further defining a generic term added sufficient structure to avoid the confines of Section 112(6). *Compare* Greenberg, 91 F.3d at 1583 (holding that Section 112(6) did not apply to the term "detent mechanism" because "detent" denoted a type of device with sufficient structure), *with* Mass. Inst. of Tech., 462 F.3d at 1354 (determining that the term "colorant selection" modifying "mechanism" did not connote sufficient structure as it was not defined in the specification). "Retainer device," therefore is outside the purview of the means-plus-function analysis, and will be construed in accordance with the standard rules of claim construction noted in *Phillips* above.

The term "retainer device" appears in three claims of the '130 application, two claims of the '609 patent, one claim of the '958 patent, and four claims of the '674 patent. *See* '130 application claim 1 at 35 ("a retainer device for removably securing said filter element within said passageway"); '609 patent claim 15 at 20:65-67 ("a retainer device disposed within said passageway and configured to removably secure said filter within said passageway"); '958 patent claim 1 at 18:17-21 ("a retainer device disposed within said passageway and configured to removably secure said filter within said passageway, and said filter is disposed between said bias exerting mechanism and said retainer device proximate said outlet opening"); '674 patent claim 9 at 27:11-13 ("the retainer device securing the filter within the passageway is located between the filter and the exit opening"); *see also* '130 application claim 12 at 37, claim 29 at 43; '609 patent claim 27 at 22:43-45; '674 patent claim 1 at 26:53, claim 13 at 27:38-39, 28:3-4, claim 14 at 28:5-8.

Aqua-Lung proposes that a "retainer device" be defined as: "a c-clip mounted in an annular internal groove provided within the tubular duct proximate the lower or bottom end portion of the housing and sized to mount a removable c-clip therein, the c-clip being sized, shaped and positioned so that the spring provides sufficient bias force to close the gas inlet aperture with the gas flow control element, and so that the c-clip holds all of the internal components of the valve in place within the tubular duct." Two Forty proposes that it be construed as "a mechanism for holding one or more parts in place."

Aqua-Lung's proposed definition operates from the assumption that 35 U.S.C. s. 112(6) applies. As a result, Aqua-Lung maintains that the term "retainer device" should be limited to the c-clip disclosed in the embodiments. *See, e.g.*, '130 application at 21 ("the c-clip 86 holding all the internal components of the valve 132 in place within the bore 78"); *see also* *id.* at 18, 26, 28-29, 31. The patents-in-suit similarly use "c-clip" in their specifications to describe a "retainer device."

The Federal Circuit expressly has rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment. *Phillips*, 415 F.3d at 1323 (citing *Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Comm'n*, 383 F.3d 1352, 1366 (Fed.Cir.2004)). This is because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments. *Id.* One of the best ways to teach a person of ordinary skill in the art how to make and use the invention is to provide an example of how to practice the invention in a particular case. *Id.* Here, therefore, the fact that the specifications disclose only a single c-clip embodiment as a "retainer device" does not, by itself, compel limiting claim scope to a c-clip embodiment.

That said, the fact that only a single embodiment is shown is a fact that, when taken into consideration with the patentee's description of the invention, may show that the inventor only intended to claim a particular

feature as his invention. *Honeywell Int'l, v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed.Cir.2006). To do so, there must be additional evidence beyond the disclosure of a single embodiment to justify narrowing a construction to that embodiment. *Agfa Corp. v. Creo Prods. Inc.*, 451 F.3d 1366, 1376-77 (Fed.Cir.2006) ("Without any indication beyond the necessary depiction to suggest limiting the invention to this single embodiment, the broader language of the claims cannot carry that unexpressed and unintended (at the time of patent drafting) limitation.").

In *Honeywell*, for example, the court limited the scope of "fuel injection system component" to a "fuel filter" for two overriding reasons. 452 F.3d at 1318. First, because the specification repeatedly described the fuel filter as "this invention" and "the present invention," the "public was entitled to take the patentee at his word and the word was that the invention [was] a fuel filter." *Id.* Second, the written description's detailed discussion of the problem with the prior art that the patented invention addressed supported the conclusion that the fuel filter used in the specification was not a preferred embodiment, but the only embodiment. *Id.* Similarly, in *Inpro II Licensing, S .A.R.L. v. T-Mobile USA, Inc.*, 450 F.3d 1350, 1354-55 (Fed.Cir.2006), the court affirmed the narrow construction of "host interface" as "direct parallel bus interface" because the only embodiment disclosed was a direct parallel bus interface with the specification emphasizing the importance of a parallel connection in solving the problems identified.

The specifications here, by contrast, neither repeatedly used a c-clip as "this invention" nor indicated any particular importance of using a c-clip as a retainer device in solving the problem of keeping water out of a scuba regulator when the diver forgets to replace the dust cap after use. In any event, in the end, the manner in which the patentee uses a term within the specification and claims will demonstrate whether the example is limiting or to be read just as an example of the invention. *Phillips*, 415 F.3d at 1323. A review of the entire intrinsic record reveals that while certain embodiments may disclose the particular structure of a c-clip for the retainer device, there is no limitation restricting the claims to such a structure. The patentee knew the term "c-clip" and had he intended to limit the patent to such an embodiment, he could have done so in the claims. Instead, the abstracts, the summaries, and the claims in the '130 application and all three patents-in-suit use the broader term "retainer device ." *See, e.g.*, '609 patent summary at 4:12-14 ("a retainer device is positioned for removably securing the filter element within the passageway"). Only when describing the representative non-binding embodiments did the patentee use the term "c-clip."

Aqua-Lung's preferred construction reads numerous limitations from the embodiments into its proposed definition. In contrast, Two Forty's proposed construction ignores the intrinsic record; that is, it does not take into the account the actual claim language and other parts of the intrinsic record outlined above. The Court, therefore, construes "retaining device" as "a mechanism configured removably to secure the filter and other parts within the passageway."

6. Bias Exerting Mechanism

As it did for "retainer device," Aqua-Lung proposes that "bias exerting mechanism" invokes 35 U.S.C. s. 112(6) because it fails to recite adequate structure to those skilled in the art. Two Forty counters that the claims describe "bias exerting mechanism" as various spring or lever structures that would not implicate any means-plus-function analysis. Despite Aqua-Lung's argument to the contrary, "bias exerting mechanism" connotes sufficient structure in the claims. Just like the addition of "detent" to "mechanism" in *Greenberg* or the combining of "retainer" with "device" above to provide adequate structure, "mechanism" becomes a structural term when placed with "bias exerting." *See Mass. Inst. of Tech.*, 462 F.3d at 1354 (finding that the generic term "mechanism" typically does not connote sufficient definite structure).

Based on the claims, one purely functional term ("mechanism") is being modified by a second structural term ("bias exerting"). Claim ten of the '130 application and claim thirteen of the '609 patent provide that the "bias exerting mechanism comprises a resilient member." '130 application claim 10 at 37; '609 patent claim 13 at 20:57-58. Claim eleven of the '130 application and claim fourteen of the '609 patent add that "said bias exerting mechanism comprises a coil spring and a spring containment sleeve, said coil spring having one end portion engaged with said pressure responsive element and an opposite end portion mounted in said containment sleeve." '130 application claim 11 at 37; '609 patent claim 14 at 20:59-63. A slight change in claim five of the '958 patent states that "said bias exerting mechanism comprises a coil spring and a spring containment sleeve, said coil spring having one end portion engaged with said valve member and an opposite end portion mounted in said containment sleeve." Claim 5 at 18:34-38.

One skilled in the art, therefore, would understand that a spring, a spring with a spring containment sleeve, or resilient member is the derived structural connotation for the generally claimed "bias exerting mechanism." *See Welker v. Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1096 (Fed.Cir.2008). Accordingly, because the inventor did not choose to express this claim element as "a means or step for performing a specified function without the recital of structure, material, or acts in support thereof," 35 U.S.C. s. 112(6), means-plus-function analysis does not apply to "bias exerting mechanism."

Having determined that Section 112(6) does not apply, the next step is to construe the term. As noted above, "bias exerting mechanism" is mentioned in the claims of the '130 application and two of the patents-in-suit as a spring, a spring with a spring containment sleeve, or resilient member. *See* '130 application claims 10-11 at 37; '609 patent claim 13 at 20:58-59, claim 14 at 20:60-61; '958 patent claim 5 at 18:34-38. The term further occurs in one other claim of the '130 application, two other claims in the '609 patent, and two additional times in claim one of the '958 patent. *See* '130 application claim 12 at 37 ("said filter element is disposed between said bias exerting mechanism and said retainer device proximate said outlet opening"); '958 patent claim 1 at 18:13-15, 19-21 ("said valve member being biased toward said closed position with a bias exerting mechanism; and ... said filter is disposed between said bias exerting mechanism and said retainer device proximate said outlet opening"); *see also* '609 patent claim 12 at 20:55-57, claim 16 at 21:5-7). The term does not appear in the claims of the '674 patent.

Aqua-Lung seeks to have "bias exerting mechanism" defined as: "A spring whose downstream end bears on the gas filter either directly or via a sleeve or spacer, whose upstream end is connected to or received within the filter cover and whose spring force is selected to urge the filter cover to its closed position absent gas pressure sufficient to overcome the spring force, and to permit the filter cover to open in response to gas pressure applied to the filter cover." Two Forty proposes that it be construed as "a portion of the device which exerts a force against the filter cover." Similar to their proposed definition of "retainer device," Aqua-Lung's proposed definition operates from the assumption that 35 U.S.C. 112(6) applies, and thus, is too narrow.

The specifications repeatedly identify various different springs as the "bias exerting mechanism." Referring to figure eight of the '609 patent, for example, the specification states: "The bias mechanism in the preferred form of the coil spring 102 creates a bias force against the piston 90 and the bottom of the containment sleeve 108 so as to press the upper surface 94 against the internal lip 82." 9:59-63. The spring's shape and configuration differs somewhat from embodiment to embodiment, but they all have the same basic characteristics. *See* '674 patent at 20:6-11 ("The embodiment of FIG. 49, or for that matter any other embodiment illustrated herein, may be modified further to provide an alternative *bias exerting mechanism*

102. This modification is illustrated in FIG. 49k. In this particular embodiment, the *bias exerting mechanism* is in the form of a Schraede valve 414") (emphasis added); *see also* '130 application at 24 (referencing FIG. 32); '958 patent at 15:4-8, 44-47 (referencing FIG. 36 & 40).

While none of the specific embodiments suggest any other structure as the "bias exerting mechanism," that does not support Aqua-Lung's argument that any resulting construction must include a spring. Despite all the embodiments showcasing a spring, persons of ordinary skill in the art rarely confine their definitions of terms to the exact representations depicted in the embodiments. Phillips, 415 F.3d at 1323. The fact that only a spring is shown in the embodiments is taken into consideration when examining the patentee's entire invention. Honeywell, 452 F.3d at 1318.

Based on the intrinsic record, and similar to "retainer device," there is no additional evidence beyond the use of a spring in the embodiments to justify narrowing any definition to a spring. Agfa, 451 F.3d at 1376-77. To the contrary, reading the specification with the claims demonstrates that the embodiment is not so limited. Phillips, 415 F.3d at 1323. First, just like "retainer device," while the embodiments disclose various springs for the "bias exerting mechanism," the inventor knew the term "spring" and could have used that term in the claims instead of the much broader term, "bias exerting mechanism."

Second, the doctrine of claim differentiation supports a construction that is not limited solely to a spring. That doctrine creates a presumption against constructions that would render a claim meaningless in its entirety by making it identical in scope to another claim. Sinorgchem Co., Shandong v. Int'l Trade Comm'n, 511 F.3d 1132, 1139 (Fed.Cir.2007). In other words, claim differentiation creates a presumption that each claim in a patent has a different scope. Kraft Foods, Inc. v. Int'l Trading Co., 203 F.3d 1362, 1368 (Fed.Cir.2000). Here, as noted above, dependent claim ten of the '130 application and dependent claim thirteen of the '609 patent recite a "resilient member," while all of the other claims with "bias exerting mechanism" do not. Any resulting construction, therefore, must take into consideration that a spring was not the only "bias exerting mechanism" intended by the inventor. To hold otherwise would render these dependent claims meaningless. Based on the foregoing, the Court adopts Two Forty's proposed construction of "bias exerting mechanism" to mean "a portion of the device which exerts a force against the filter cover."

7. Fluid Flow Control Valve

The term "fluid flow control valve" only appears in one independent claim in the '130 application (claim 1) and the '674 patent (claim 13). FN3 The preamble of both those claims reads: "A fluid flow control valve comprising: [body of claim]." '130 application claim 1 at 35; '674 patent claim 13 at 27:30-35, 40-41. Because the phrase "fluid flow control valve" appears in the preamble, a preliminary question exists as to whether the preamble is, in fact, a separate limitation. *See* Symantec Corp. v. Computer Assocs. Int'l, Inc., 522 F.3d 1279, 1288 (Fed.Cir.2008) (stating that when evaluating the significance of a preamble, the first step is to determine whether the disputed language is a claim limitation).

FN3. The term does appear in two dependent claims of the '674 patent. *See* '674 patent claim 5 at 28:9-12, claim 20 at 28:32-34.

There is no bright-line rule that determines when preamble language should be deemed to constitute a limitation of the claim. This determination requires a review of the entire "patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim." *Corning Glass Works v.*

Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257 (Fed.Cir.1989); *see* Bell Commc'ns Research, Inc. v. Vitalink Commc'ns Corp., 55 F.3d 615, 620 (Fed.Cir.1995) ("[W]hen the claim drafter chooses to use *both* the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.").

Language within a preamble generally does not limit the scope of the claim. *See, e.g.,* Symantec, 522 F.3d at 1289. In certain circumstances, however, the language of a preamble may act as a limitation if it is "necessary to give life, meaning, and vitality" to the claim. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed.Cir.1999); *see* *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1305 (Fed.Cir.2005) ("[I]f the preamble helps to determine the scope of the patent claim, then it is construed as part of the claimed invention."). Giving "life, meaning, and vitality" to the claim may occur where the preamble provides an antecedent basis for elements in the body of the claim. *See* *Eaton Corp. v. Rockwell Int'l Corp.*, 323 F.3d 1332, 1339 (Fed.Cir.2003) ("When limitations in the body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention."); *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1350 (Fed.Cir.1998) (determining that if a preamble provides antecedents for ensuing claim terms then the preamble limits the scope of the claim).

In *NTP*, for example, the phrases "to at least one of the plurality of destination processors" and "electronic mail system" occurred in the preamble as well as the body of the claim. 418 F.3d at 1305. The Federal Circuit held that because the antecedent use was necessary to provide context for the rest of the claim limitations, the terms in the preamble were limiting. *Id.* at 1305-06.

Under this framework, Aqua-Lung contends that "fluid flow control valve" appears in the preamble to provide antecedent basis to claim language that functions as a limitation. Two Forty counters that the term is nothing more than introductory and the Court should not attempt to read it as a limitation, but instead adopt a broad meaning. Beginning the analysis with the words of the claim, Aqua-Lung points to claim thirteen of the '674 patent as evidence of the use of the term as an antecedent. That claim reads in pertinent part:

a *fluid flow control valve*, comprising:

a housing defining an internal passageway, where the passageway has a gas inlet opening near an upstream end of said housing and a gas outlet opening near a downstream end of said housing and spaced from the gas inlet opening; ...

wherein the housing of the *fluid flow control valve* includes a portion threaded into the bore[.]

Claim 13 at 27:30-35, 40-41 (emphasis added). Aqua-Lung is correct that the term does not only appear in the preamble of the claim, but also within the body. Consequently, at first glance this subsequent use of the introductory term in the body of the claim appears to be exactly what occurred in *NTP*.

"Fluid flow control valve," however, does not rely upon and derive any antecedent basis from the preamble. In *NTP*, if "electronic mail system" is removed from the body of the claim, then the entire claim falls apart as the antecedent connection is severed. By contrast here, "fluid flow control valve" appears to provide nothing more than context for the body of the claim and can be excised without any resulting collapse in the understanding of it. *See* *Syantec*, 522 F.3d at 1289 (stating that it is assumed that the preamble language merely provides context for the claims, absent any indication to the contrary in the claims, the specification or the prosecution history). That is, the body of the claim is not dependent on the preamble term to act as an

antecedent to any language in the claim. FN4

FN4. To hold that the term is a preamble term that limits the claim additionally would lead to a superfluous definition. A review of the entire patent provides understanding of what the inventor actually invented and intended to encompass by the claim. The body of the claim sets out the complete invention, and thus, importing all the words to the right of the word "comprising" would incorporate a definition into the preamble term followed by different limitations in the claim body rendering the set meaningless.

Having determined that "fluid flow control valve" is a preamble term and not a claim limitation, the remaining step is to construe it. As noted above, "fluid flow control valve" is mentioned in one independent claim of the '130 application and '674 patent and in two dependent claims of the '674 patent. *See* '130 application claim 1 at 35; '674 patent claim 13 at 27:30-35, 40-41; claim 15 at 28:9-12, claim 20 at 28:32-34.

Aqua-Lung proposes that "fluid flow control valve" be construed as: "A valve including a housing which defines a central passageway having gas inlet and outlet openings, a gas pressure-responsive closure element disposed within the passageway for selectively opening and closing of the inlet opening to gas flow in response to gas pressure exerted thereon at the inlet opening, a spring that urges the gas pressure responsive closure element toward its closed position, a filter disposed within the passageway and a c-clip that holds the closure element, spring and filter within the passageway against the spring force." Two Forty seeks to have the term defined as "a mechanism which controls the flow of fluid." Aqua-Lung's definition attempts to track the summary of the invention. Two Forty argues that since the phrase is used in the preamble, with specific elements of the valve claimed individually, any resulting definition should be defined broadly.

Two Forty is correct that the term should be interpreted broadly because a "fluid flow control valve" is what the inventor is claiming was his invention. *See* '609, '958, '674 patent abstract ("A fluid flow control valve is disclosed."). Two Forty's proposed broad construction is therefore preferable because the inventor specifically set forth that the purpose of the "fluid flow control valve" was to control the flow of fluid flowing into a scuba regulator to stop dust and other particulars from entering it. *See* '609 patent summary at 3:66-4:2 ("To achieve the foregoing and other objects and in accordance with the purpose of the present invention, as embodied and broadly described herein, a fluid flow control valve is disclosed."). Based on the foregoing, the Court construes a "fluid flow control valve" to mean "a mechanism which controls the flow of fluid."

8. Filter Assembly

The term "filter assembly" only appears in one independent claim in the '609 patent, the '958 patent, and the '674 patent. *See* '609 patent claim 5 at 20:6-7; '958 patent claim 1 at 17:60-61; '674 patent claim 1 at 26:43-44. Looking at claim one of the '958 patent, which is illustrative of the other patents, it states in pertinent part:

A filter assembly for use with a regulator device, said *filter assembly* comprising:

a housing defining an internal passageway having a gas inlet opening near an upstream end of said housing, and a gas outlet opening spaced from said gas inlet opening, said housing having a first attachment portion

configured for connection of an upstream end of said *filter assembly* to a pressurized source of breathable gas and a second attachment portion configured for connection of a downstream end of said *filter assembly* to said regulator device, said gas inlet opening defining an upstream rim which is substantially flush with or upstream of an upstream end of said first attachment portion[.]

Claim 1 at 17:60-18:6 (emphasis added). Thus, "filter assembly" appears in the preamble of those claims and a preliminary question arises again as to whether the preamble is a separate limitation. As it did for "fluid flow control valve," Aqua-Lung argues that "filter assembly" in the body of the claims is a limitation and its use in the preamble acts as the antecedent basis.

For the same reasons mentioned above for "fluid flow control valve," however, Aqua-Lung's argument similarly fails here. "Filter assembly" is not a claim limitation, but instead provides nothing more than context for the body of the claim. "Filter assembly" can be excised from the body of the claims without any resulting collapse in understanding them.

Having determined that the preamble does not add any limitations, the remaining step is to construe the term. As noted above, the term "filter assembly" only appears in one independent claim in each of the patents-in-suit. *See* '609 patent claim 5 at 20:6-7; '958 patent claim 1 at 17:60-61; '674 patent claim 1 at 26:43-44. The term also appears in a number of dependent claims. *See* '609 patent claims 6-17; '958 patent claims 2-7; '674 patent claims 2-8. It does not appear in the original '130 application and was therefore added by amendment during the prosecution of the '609 patent.

Aqua-Lung proposes that "filter assembly" be defined as: "A valve, including a housing which defines a central passageway having gas inlet and outlet openings, a gas pressure-responsive closure element disposed within the passageway for selectively opening and closing of the inlet opening to gas flow in response to gas pressure exerted thereon at the inlet opening, a spring that urges the gas pressure responsive closure element toward its closed position, a filter disposed within the passageway and a c-clip that holds the closure element, spring and filter within the passageway against the spring force." This is the same definition proposed for "fluid flow control valve." Two Forty seeks to have the term defined as "a device, or collection of parts, which includes a portion through which a gas or fluid (such as air or water) can flow, but which prevents passage of particles or impurities."

Aqua-Lung's proposed definition seeks to incorporate the limitations that follow "comprising," as explained above, and attempts to move all such limitations into the definition of the preamble term itself. For example, the portion of Aqua-Lung's proposed definition that reads, "passageway for selectively opening and closing of the inlet opening to gas flow in response to gas pressure exerted thereon at the inlet opening" goes beyond the filter assembly itself to describe a "passageway." If Aqua-Lung's proposed definition was adopted, "filter assembly" would be read with its definition followed by a claim that is redundant and nonsensical as it would repeat the previous definition. In light of this problem, Aqua-Lung represented at the hearing that its proposed construction could be simplified considerably to include just the main components or elements from the claim body. Their amended construction would read "a valve, which includes the housing that defines the passageway, the pressure-responsive element, bias exerting mechanism, filter, and retainer device." Such a rendering still is too narrow.

Two Forty alleges that its proposed construction is based on the claim language as well as the use of the term within the specification. First, there is a problem with construing "filter assembly" under the claim language as meaning "any collection of parts including a filter" given that what the patentee invented was a

valve with a set number of specified parts. Regarding the alleged support for their definition in the specification, Two Forty quotes two passages from the '609 patent where the term language supposedly appears in the specification, yet these refer to a prior art scuba regulator. *See* '609 patent 3 :53-54, 7 :40-41. In fact, the term "filter assembly," appears nowhere in the specification as filed. While "filter assembly" is not used outside of the claims, nothing in the intrinsic record indicates that the "filter assembly" is anything other than what is described in each of the disclosed embodiments.

The end result is that neither construction proposed by the parties is adequate. While the claim is limited by everything to the right of the word "comprising," any definition should not import unnecessarily those limitations into this introductory term. Nor will it render the limitations following "comprising" as superfluous. Any other reading would seem contrary to the intent of the inventor. *See* Phillips, 415 F.3d at 1316 (stating that claim interpretation should comport with the inventor's intent). Accordingly, the Court construes "filter assembly" to mean "a device consisting of parts through which a gas or fluid can flow, but which prevents passage of particles or impurities."

9. Retractable Filter Cover

The term "retractable filter cover" only appears in the claims of the '609 patent. The phrase was not present in the '130 application specification as filed, but was added by amendment during prosecution. The term first appears in claim five of the '609 patent, which reads in pertinent part:

A filter assembly for use with a regulator device, said filter assembly comprising:

a housing ...;

a *retractable filter cover* disposed within said passageway, said *filter cover* having a range of motion between (i) a closed position in which said *filter cover* blocks said gas inlet opening and prevents fluid flow therethrough and (ii) an open position in which said *filter cover* permits fluid flow through said gas inlet opening, said *filter cover* being biased toward said closed position, said *filter cover* intercepting a plane defined by an upstream end of said first attachment portion when in said closed position; and

a filter disposed in said passageway downstream of said *filter cover*.

'609 patent claim 5 at 20:6-27 (emphasis added).

Because "retractable filter cover" was added by amendment, Aqua-Lung claims that the term merely is a new name for an element already identified within the specification, namely the "pressure responsive element." Aqua-Lung, therefore, offers the same construction for both terms: "A gas pressure-responsive valve closure element that covers the filter and has a rounded or tapered head to seal the gas inlet opening from inside in the absence of applied gas pressure, and which is displaced axially against the action of a spring to open the gas inlet opening in the presence of applied gas pressure." Two Forty's proposed construction is: "A portion of the device which can be moved from a first position where it prevents flow into the device, to a second position, where it allows flow into the device." Two Forty asserts that their proposed claim construction is based on claim language and context, use of the term in the specification, and the meaning understood by those skilled in the art.

Since the term appears only in the claims, understanding the claim term in light of the specification relies

less on specific usage of the term and more upon the overall context of its use. In other words, the construction depends upon how one skilled in the art would understand "retractable filter cover" based on the invention disclosed in the patent. As stated in the priority '130 application, the patents-in-suit disclose an invention solving a problem in the sport of scuba diving. That is, the invention prevents inadvertent entry of water and other contaminants into the regulator when not connected to a pressurized fluid. As described in the background of the invention, the dust cap or dust cover is the prior art method for preventing such contamination.

In light of the object of the invention and use of the term within the claims, one skilled in the art would understand that the "retractable filter cover" is the element that solves the problem of contamination by blocking fluid flow when it is in a closed position. Aqua-Lung argues that the filter cover must operate to cover the filter entirely, but that reading has no basis in the specification. In the disclosed embodiments, and claim five of the '609 patent, the filter is a downstream element from the retractable filter cover. As long as the "retractable filter cover" prevents fluid flow when it is in the closed position, it serves the intended function within the invention. In this manner, the "retractable filter cover" serves the same function as the prior art dust cover, which does not cover the filter in the sense argued by Aqua-Lung.

Additionally, Aqua-Lung's proposed construction imports structural limitations into the definition by requiring that the "retractable filter cover" possess a rounded or tapered head. As Aqua-Lung contends that "retractable filter cover" means the same thing as "pressure responsive element," it refers to the description of the latter in the specification. Specifically, Aqua-Lung argues that all ten of the embodiments of the "pressure responsive element" in the priority specification disclose a curved head. The specification, however, also states that while curved upper surfaces are preferred, "other surfaces shapes and arrangements may be used to plug or seal the opening 80." '609 patent at 9:24-29. Two Forty also notes that the patent specification expressly maintains that the invention should not be limited by the specific embodiments. *Id.* at 8:44-46. Because one skilled in the art at the time would read the specification as encompassing additional surface shapes, adding a rounded or tapered head to the definition of "retractable filter cover" is not warranted. Furthermore, because one skilled in the art would recognize the spring as a separate element of the patentee's device, reference to a spring within the construction of "retractable filter cover" is likewise unnecessary. For the foregoing reasons, the Court construes "retractable filter cover" to mean "an element of a device which can move from a first position where it prevents fluid flow into the device, to a second position, where it allows fluid flow into the device."

10. Pressure Responsive Element

As mentioned above, Aqua-Lung seeks to have "pressure responsive element" carry the same definition as "retractable filter cover," namely as: "A gas pressure-responsive valve closure element that covers the filter and has a rounded or tapered head to seal the gas inlet opening from the inside in the absence of applied gas pressure, and which is displaced axially against the action of a spring to open the gas inlet opening in the presence of applied gas pressure." Two Forty proposes a significantly broader construction of the term as "a portion of the device which responds to a force, such as by an object or fluid pushing against it."

The phrase "pressure responsive element" or alternately "pressure responsive member or element" appears extensively throughout the '130 application as filed and the claims of the '609 and '674 patents. The summary of the '609 patent provides that: "*A pressure responsive element* is disposed within the passageway for selectively opening and closing of the inlet opening to fluid flow in response to fluid pressure exerted thereon at the inlet opening." 4:4-7 (emphasis added). In the first seven embodiments of the

specification, the element is described particularly and identified in the corresponding figures as "88." In its description of the first embodiment, for example, the '609 patent explains: "*A pressure responsive member or element 88 is positioned within the bore 78 proximate the upper or inlet end 64. In this particular embodiment, the pressure responsive element 88 is in the form of a piston 90 having a head portion 92 terminating in an upper curved surface 94 which seals against the lip 82 and projects outwardly from the opening 80.*" Id. at 9:17-23 (emphasis added).

The phrase appears in claims of the '609 patent, for example, as "*a pressure responsive element mounted within said duct proximate said gas inlet opening and adapted for movement between a first position for sealing said duct to prevent gas from entering said inlet opening, and a second position for opening said duct to permit gas to enter said inlet opening and pass through said duct[.]*" Claim 1 at 17:60-65 (emphasis added). The term also appears in the claims of the '674 patent. *See* Claim 1 at 26:43-48 ("*A filter assembly for use with a regulator device, said filter assembly comprising ... a pressure responsive element located within the bore and moveable between a first position and a second position.*").

As explained in the discussion of "retractable filter cover," Aqua-Lung's proposed construction is too narrow in that it imports specific structural limitations, i.e. the shape of the head and the spring, into the definition. Conversely, Two Forty's definition as essentially any element that responds to a force is too generic and lacks meaning derived from the specification. In light of the stated purpose of the invention, one skilled in the art would understand that the "pressure responsive element" provides a seal against fluid flow in order to prevent contamination of a regulator. As identified by Aqua-Lung, one skilled in the art would understand that the "pressure responsive element" is the same object as the "retractable filter cover." Based on the foregoing, the construction adopted for "pressure responsive element" will be "an element of a device which can move from a first position where it prevents fluid flow into the device, to a second position, where it allows fluid flow into the device."

IV. CONCLUSION

For the foregoing reasons, the disputed terms are construed as follows:

- (1) "Housing" shall mean "a structure surrounding an internal space."
- (2) "Passageway" shall mean "a conduit formed in the housing that allows gas to pass through it."
- (3) "Bore" shall mean "a cylindrical hole or passage."
- (4) "Duct" shall mean "a conduit formed in the housing that allows gas to pass through it."
- (5) "Retaining device" shall mean "a mechanism configured removably to secure the filter and other parts within the passageway ."
- (6) "Bias exerting mechanism" shall mean "a portion of the device which exerts a force against the filter cover."
- (7) "Fluid flow control valve" shall mean "a mechanism which controls the flow of fluid."
- (8) "Filter assembly" shall mean "a device consisting of parts through which a gas or fluid can flow, but

which prevents passage of particles or impurities."

(9) "Retractable filter cover" shall mean "an element of a device which can move from a first position where it prevents fluid flow into the device, to a second position, where it allows fluid flow into the device."

(10) "Pressure responsive element" shall mean "an element of a device which can move from a first position where it prevents fluid flow into the device, to a second position, where it allows fluid flow into the device."

This matter will be set for a further case management conference on April 8, 2009 at 2:30 p.m. The parties are instructed to file a joint updated case management conference statement by April 1, 2009.

IT IS SO ORDERED.

N.D.Cal.,2009.

Aqua-Lung America, Inc. v. American Underwater Products, Inc.

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