

United States District Court,  
W.D. Oklahoma.

**AIRGO IP, LLC, an Oklahoma Limited Liability Company and Airgo Systems, LLC, an Oklahoma Limited Liability Company,**  
Plaintiffs.

v.

**ARVINMERITOR, INC., an Indiana Corporation; Pressure Systems International, Inc., a Texas Corporation; and Equalaire Systems, Inc., a Texas Corporation,**  
Defendants.

**Arvinmeritor, Inc., an Indiana Corporation; Pressure Systems International, Inc., a Texas Corporation; and Equalaire Systems, Inc., a Texas Corporation,**  
Counter-Plaintiffs.

v.

**Airgo IP, LLC, an Oklahoma Limited Liability Company and Airgo Systems, LLC, an Oklahoma Limited Liability Company, and Anthony Ingram,**  
Counter-Defendants.

No. CIV-05-1405-R

**Feb. 23, 2007.**

## **ORDER**

**DAVID L. RUSSELL, District Judge.**

In this case Plaintiffs Airgo IP, L.L.C. ("Airgo") and Airgo Systems, L.L.C. ("Airgo Systems") (collectively the "Airgo Plaintiffs") allege that Defendants Arvinmeritor, Inc. ("Arvinmeritor"), Pressure Systems International, Inc. ("PSI") and Equalaire Systems, Inc. ("Equalaire") have infringed three patents issued to Anthony L. Ingram ("Ingram") which were assigned to Airgo and of which Airgo Systems is the exclusive licensee. The three patents they claim Defendant have infringed are United States Patent Nos. 6,105,645 (the "645 Patent"), 6,585,019 (the "019 Patent") and 6,968,882 (the "882 Patent"), each of which is entitled "Rotary Union Assembly for Use in Air Pressure Inflation Systems for Tractor Trailer Tires," which were issued August 22, 2000, July 1, 2003 and November 29, 2005, respectively. Defendants deny that they have infringed any of those patents. All three Defendants have asserted counterclaims in which they seek declaratory judgments declaring that they have not infringed Plaintiff's patents and that Plaintiffs' patents are invalid because they fail to meet the requirements of patentability including but not limited to those set forth in 35 U.S.C. s.s. 101, 102, 103 and/or 112. PSI and Equalaire also assert counterclaims against Plaintiffs for infringement of United States Patent No. 5,769,979 (the "979 Patent"), entitled "Rotary Air Connection for Tire Inflation System," issued June 23, 1998 to Mark Naedler, of which Equalaire is the assignee and PSI is the exclusive licensee having the right to enforce the 979 Patent against infringers. Defendant PSI asserts other counterclaims against the Plaintiffs and additional Counter-Defendant Anthony Ingram.

The Airgo Plaintiffs contend that Defendants' product "Meritor Tire Inflation Systems (MTIS)" being sold and offered for sale infringes independent claim 15 and dependent claim 16 of the 645 Patent. The parties agree that the following terms which are used in claim 15 of the 645 require construction pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed.Cir.1995), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 571 (1996): "annular sealing member," "tubular member," and "air hose assembly." Defendants/Counter-Plaintiffs PSI and Equalaire contend that the Airgo Plaintiffs have infringed, contributed to infringing or induced the infringement of Claims 1, 2 and/or 3 of their 979 Patent by making, using, offering for sale or selling products including but not limited to Airgo System. The parties agree that the following terms in Claim 1 of Defendants'/ Counter-Plaintiffs' 979 Patent require construction pursuant to *Markman, supra*: "tubular member," "resilient seal" and "the ends of the hollow member are free to pivot in the resilient seals." The parties have briefed their proposed construction of the terms in the claims at issue. The Court now construes the terms of the claims at issue pursuant to *Markman* and enters its Findings of Fact and Conclusions of Law.

### ***FINDINGS OF FACT***

1. United States Patent No. 6,105,645 (the "645 Patent") entitled "Rotary Union Assembly For Use in Air Pressure Inflation Systems for Tractor Trailer Tires" was issued August 22, 2000 to Anthony L. Ingram and is assigned to Plaintiff Airgo. Plaintiff Airgo Systems is the exclusive licensee of the 645 Patent. Independent Claim 15 and Dependent Claim 16 of the 645 Patent, with the claim terms at issue in bold, are as follow:

15. A rotary union assembly for use in an automatic tire inflation system for maintaining a desired pressure in a plurality of pneumatic tires mounted on the wheels of a vehicle of a type having sealed axles, a source of pressurized air in fluid communication with the axles and a hub cap at the end of each axle for providing a lubrication compartment for the wheel bearings, said assembly comprising:

a first stationary fitting carried by an end of a sealed axle and defining an open channel extending axially therethrough;

an **annular sealing member** disposed in said first fitting about said channel;

a stationary **tubular member** defining an upstream end portion and a downstream end portion, said upstream end portion extending axially through said channel in said first fitting and communicating with the interior of said axle, said sealing member engaging said tubular member and forming an airtight seal within said first fitting about said tubular member;

a housing, attachable to the exterior of a hub cap for rotation with said hub cap, said housing defining at least one air passageway extending therethrough and being rotatably mounted on said downstream end portion of said tubular member such that said tubular member communicates the interior of said axle with said air passageway in said housing, whereby air flow is directed from said sealed axle through said stationary tubular member to said rotatable housing; and

an **air hose assembly** communicating said air passageway in said rotatable housing with at least one of the vehicle tires.

16. The assembly of claim 15 wherein said **annular sealing member** in said first fitting is an o-ring, said o-

ring preventing relative rotation between said **tubular member** and said fitting while allowing said **tubular member** to be axially translatable with respect to said o-ring whereby the durability of said airtight seal about said **tubular member** is enhanced and the axial spacing between the first fitting and said housing can be varied.

2. United States Patent No. 5,769,979 (the "979 Patent"), entitled "Rotary Air Connection for Tire Inflation System" was issued June 23, 1998 to Mark Naedler. This patent was assigned to Defendant/Counter-Plaintiff Equalaire and Defendant/Counter-Plaintiff PSI was given an exclusive license for it, including the right to enforce the 979 Patent against infringers. Claim 1 of the 979 Patent, with the claim terms at issue in bold, is as follows:

1. In an air inflation system for a vehicle having at least one axle with at least one wheel having a pneumatic tire at each end of the axle and said vehicle having an air supply supplying air to the inside of the axle and a hub cap at each end of the axle, the improvement in a rotary air connection for supplying air to the rotating tires comprising,

a hollow **tubular member** able to serve as a conduit for pressurized air having a first and second end,

a circular first **resilient seal** generally coaxial with the axle,

a sealable connection between the second end of the said hollow member and the first seal creating sealed communication between the air supply inside the axle and the interior of the said hollow member,

a circular **resilient** second **seal** generally coaxial with the hub cap,

a sealable connection between the first end of the said hollow member and the second seal creating sealed communication between a pressure conduit which rotates with the said hub cap and the interior the said hollow member,

said hollow member is positioned between the first and second seals so that during rotation of the hub cap in relation to the said axle when the hub cap is not perfectly centered with the axle **the ends of the hollow member are free to pivot in the resilient seals** and compensate for any misalignment.

Dependent Claims 2 and 3 of the 979 Patent provide as follows:

2. The apparatus of claim 1 wherein the **tubular member** is a straight member.

3. The apparatus of claim 2 wherein the **tubular member** is supported solely by the first and second **resilient seals**.

3. The parties agree that the terms in bold in the patent claims quoted above must be construed.

### ***CONCLUSIONS OF LAW***

1. The construction of patent claims is a matter exclusively for the Court. *Markman v. Westview Instruments, Inc.*, 517 U.S. at 372 & 391, 116 S.Ct. at ---- & 1395, 134 L.Ed.2d at 581 & 592.

2. "Claim construction begins with the words of the claim." *Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 318 F.3d 1143, 1148 (Fed.Cir.2003). Patent claim terms are to be given the ordinary and customary meaning they 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, 1313 (Fed.Cir.2005), *cert. denied*, 546 U.S. 1170, 126 S.Ct. 1332, 164 L.Ed.2d 49 (2006); *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1116 (Fed.Cir.2004); *ResQNet.com, Inc. v. Lansa, Inc.*, 346 F.3d 1374, 1378 (Fed.Cir.2003); *Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 318 F.3d at 1148.

3. In determining how claim terms would be understood by persons of skill in the art, the Court looks to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean," including "the words of the claims themselves, the prosecution history, the extrinsic evidence concerning relevant scientific principles, the meaning of technical terms and the state of the art." *Phillips v. AWH Corp.*, 415 F.3d at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration System, Inc.*, 381 F.3d at 1116).

4. Claim terms must be read and understood in context. *See Phillips v. AWH Corp.*, 415 F.3d at 1315. "In most cases, the best source for discerning the proper context of claim terms is the patent specification wherein the patent applicant describes the invention." *Metabolite Laboratories, Inc. v. Laboratory Corp. of American Holdings*, 370 F.3d 1354, 1360 (Fed.Cir.2004), *cert. dismissed*, 548 U.S. 124, 126 S.Ct. 2921, 165 L.Ed.2d 399 (2006). The specification is the "single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). Usually, the specification is dispositive. *Id.* However, other claims of the patent may shed light on the meaning of a disputed term. *Phillips v. AWH Corp.*, 415 F.3d at 1314. Because claim terms are usually used consistently throughout a patent, the usage of a term in one claim can illuminate the meaning of the same term used on other claims. *Id.* Differences among claims can likewise assist in understanding the meaning of particular claim terms. *Id.* Nonetheless, "in examining the specification for proper context, ... this court will not at any time import limitations from the specification into the claims." *Varo, L.P. v. Pason Systems USA Corp.*, 436 F.3d 1368, 1373 (Fed.Cir.2006). Thus, preferred embodiments or drawings contained in the specification do not operate to limit claims when the claim language is broader than such embodiments or drawings. *See Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 318 F.3d at 1148; *Laitram Corp. v. NEC Corp.*, 163 F.3d 1342, 1348 (Fed.Cir.1998).

5. In addition to the specification, the Court should also consider a patent's prosecution history which is in evidence in construing disputed claim terms. *Markman*, 52 F.3d at 980. The prosecution history provides evidence of how the inventor and the Patent and Trademark Office understood the patent and of whether the inventor limited the invention, making the scope of a claim narrower than it would otherwise be, during the course of prosecution. *Vitronics*, 90 F.3d at 1582-83; *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 122 S.Ct. 1831, 152 L.Ed.2d 944 (2002).

6. Analysis of the intrinsic evidence alone-the language of the claims, the specification and the prosecution history-will generally resolve any ambiguity in disputed claim terms and in such circumstances it is improper to consider extrinsic evidence. *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d at 1582.

7. If ambiguity in disputed claim terms remains after utilizing intrinsic evidence to construe the terms, the Court may consult extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. *See Vitronics Corp.*, 90 F.3d at 1582.

8. The terms "annular sealing member" and "tubular member" as used in Claim 15 of the Airgo Plaintiffs' 645 Patent (and in Claim 1 of their 019 Patent and, in the case of the term "annular sealing member," in Claim 40 of their 882 Patent) are not ambiguous. The terms are not expressly defined in the specification but the meaning of those terms is apparent from the plain language of the terms read in light of the patent specification and prosecution history. The Court concludes that "annular sealing member" means a ring-shaped component that prevents the leakage or passage of air and that "tubular member" means a member or component comprised of a flexible tube and a stationary shaft. The term "air hose assembly" as used in Claim No. 15 of the 645 Patent is ambiguous but when read in conjunction with the entire specification means an air hose with a connection at each end, that is, an air hose that connects the axle spindle or interior with the rotary housing. *See* Summary of the Invention, 645 Patent at lines 35-59; Description of the Preferred Embodiment in the Drawings at col. 4, 1.60-63, col. 5, 1.33-39 & col. 6, 1.13-19.

9. The terms "tubular member," and "resilient seal" as used in Claim 1 of Defendants Equalaire's and PSI's 979 Patent are not ambiguous. The terms are not expressly defined in the specification but the meaning of the terms is apparent from the plain language of the terms read in light of the patent specification and prosecution history. The Court concludes that "tubular member" means a rigid tube or rigid tube-shaped or cylindrically-shaped component. The specification dictates that the tubular member be rigid. *See* 979 Patent at Abstract & Specification at col. 1, 1.58-62, col. 2, 1.5-8 & col. 3, 1.4-6. The term "resilient seal" means a device or component that creates a substantially non-leaking union between two mechanical elements which is capable of recovering size and form after deformation. The term or phrase "the ends of the hollow member are free to pivot in the resilient seals" means exactly what it says, i.e., does not require construction or means that the hollow member may pivot between the seals.

***Analysis as to the Meaning of the Term "Tubular Member" as used in Claim 15 of Plaintiffs' 645 Patent***

Plaintiffs take the position that "tubular member" as used in Claim 15 of their 645 patent means "a hollow tube that promotes the flow of air, and has a length greater than the width of its outer diameter." According to Plaintiffs, the "tubular member" as used in Claim 15 "can be rigid, flexible, or have a flexible portion," i.e., be part rigid and part flexible. Plaintiffs' Opening Claim Construction Brief at p. 25. This is in contradistinction to Dependent Claim 17, Plaintiffs urge, which states that at least a portion of the tubular member is flexible.

Defendants maintain, however, that "tubular member" as used in Claim 15 of Plaintiffs' 645 patent should be construed to mean "member comprising flexible air hose 40 and rigid shaft 45." This is so, Defendants assert, because the term "tubular member" appears only in the claims and not in the specification and the patentee specifically defined the tubular member as "comprised of the flexible hose 40 and rigid shaft member 45" in his preliminary amendment to his original patent application. Defendants assert that the term "tubular member" was only originally used by the patentee in Claim 13 of his original patent application and the only antecedent basis for that term in the specification is in the use of the term "flexible tube member," which indicates that the "tubular member" must be flexible. Defendants suggest that as a "newly-recited structure," the term "tubular member," first appears in claim 15 of the 645 patent and must be construed to mean what the patentee said it means in the "Remarks" section of his preliminary amendment to the patent application. Defendants further contend that the specification of the '645 further supports their construction, citing the '645 patent, col. 2, lines 35-60. Moreover, they assert that Plaintiffs' argument that the "tubular member" may be either all rigid or all flexible is wholly without support in the intrinsic record. They in effect assert that because Plaintiffs' patentee described "tubular member" to include a "flexible hose portion"

and a "rigid shaft" to distinguish it from prior art and obtain allowance of the patent claim, Plaintiffs are estopped to construe the term differently in their action against alleged patent infringers. Defendants assert that "Airgo's construction [of "tubular member"] would impermissibly broaden the claim scope beyond the original disclosure and undo what the patentee argued to the PTO [Patent and Trademark Office]." Response of Defendants/Counter-Plaintiffs to Plaintiffs/Counter-Defendants' Opening Claim Construction Brief at p. 16.

Responding to Plaintiffs' argument based upon the doctrine of claim differentiation, Defendants assert that merely because "claims are presumed to differ in scope does not mean that every limitation in a claim must be distinguished between its counterpart in another claim, but only that at least one limitation must differ." *Id.* at p. 15., quoting *Kraft Foods, Inc. v. International Trading Co.*, 203 F.3d 1362, 1368 (Fed.Cir.2006). They assert that claim 17 can be distinguished from claims 15 and 16 in Plaintiffs' '645 patent by the "whereby clause" and that claim 17 is not *necessarily* differentiated from claim 15 based on the limitation on "tubular member." However, even if claim differentiation were applicable, Defendants assert that the doctrine creates only a presumption that each claim has a different scope, which presumption in this case is rebutted by the written description of the invention and the prosecution history which explain the necessity of and disclose a flexible hose to allow for off-center mounting. Claim differentiation, Defendants argue "cannot broaden claims beyond their correct scope."

Plaintiffs in reply point out that the patentee's statement in the "Remarks" section of the preliminary amendment to his patent application specifically refers to the "tubular member" employed "[i]n the embodiment of the Applicant's invention illustrated in the drawings," to comply with the requirements of 37 C.F.R. s. 1.71(b). 37 C.F.R. s. 1.83(a), in support of 35 U.S.C. s. 112. Plaintiffs further argue as follows:

The claims of Airgo's Patents-in-Suit, clearly include limitations beyond the ordinary meaning of "tubular member." Those limitations are that the "tubular member" must be "stationary," and that the housing is to be "rotatably mounted on the downstream end portion of said tubular member." With the exception of independent claims 73 and 80 of Airgo's '882 Patent, the claims further show that, in each instance that the term "tubular member" is recited in an independent claim, a dependent claim adds the limitation that the "tubular member is flexible" or "at least a portion of said tubular member is flexible." (See claims (15 & 16) of the '645 Patent (Exhibit 1); claims (1 & 5), and (6 & 10) of the '019 Patent (Exhibit 2); and claims (1 & 5), (6 & 10), (18 & 19), (21 & 22), (23 & 24), (28 & 30), (40 & 42), (52 & 54), and (58 & 59) of the '882 Patent (Exhibit 3)). By reading the claims of Airgo's Patents-in-Suit, in light of their specifications and prosecution histories, One Skilled in the Art would understand that a single rigid tubular member is not excluded as an embodiment of the invention. (Exhibit 7, video comparing the preferred embodiment to the single rigid tubular member embodiment). Specifically, although claims 1 and 13 of the '645 Patent, as originally filed, included the element "flexible tube" (Exhibit 1, tab 1), the limitation "flexible" was removed from the claims by amendment (Exhibit 1, tab 4) in the response to the first rejection of the application by the PTO (Exhibit 1, tab 5). By issuing claims 1, 13 and 15 as amended, the PTO concurred with the applicant that "flexible" is not a limitation to be imposed on the element tubular member. Further, in none of the specifications or prosecution histories of Airgo's Patents-in-Suit does the Applicant affirmatively identify any further limitations to the claim term "tubular member" that are either "essential," "critical," or required to avoid prior art. Accordingly, the term "tubular member" should carry its ordinary meaning.

Plaintiffs' Reply Brief at pp. 8-9.

The term "tubular member" is unambiguous to a lay person; it means a "tube" or tube-shaped or

cylindrically-shaped component, without any limitation as to its rigidity or flexibility. However, the Court's task is to ascertain the meaning the term would have to a person of ordinary skill in the art in question at the time of the invention. *E.g.*, *Innova*, 381 F.3d at 1116. A person of ordinary skill in the art is deemed to read and understand patent claim terms in the context of the invention's written description or specification and the patent's prosecution history. *See Phillips v. AWH Corp.*, 415 F.3d at 1313-14. "The words of patent claims have the meaning and scope with which they are used in the specification and the prosecution history." *Kinik Co. v. International Trade Commission*, 362 F.3d 1359, 1365 (Fed.Cir.2004). In a case of doubt or ambiguity as to a claim term's meaning, "it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38, ---S.Ct. ----, 25 L.Ed. 68 (1878). Indeed, the rules of the Patent and Trademark Office require that patent application claims must

conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

37 C.F.R. s. 1.75(d)(1).

The term "tubular member" is not used or defined in the '645 patent specification at all. Rather, the specification repeatedly refers to a stationary "flexible air hose" and an "elongated stationary shaft," "stationary shaft"/or "elongated shaft." 645 Patent, col. 2, lines 38, 53-54, 56 & 67; col. 3, lines 1-2, 9, 13 & 14. Likewise, the "Description of the Preferred Embodiment in the Drawings" refers to a "flexible air hose," "air hose" or "hose" and an "elongated steel shaft" or "shaft." *See id.* at col. 5, lines 7, 8, 13, 14, 19, 24, 30, 37-38 & 44. The other independent claims of the 645 patent, claims 1, 9 and 13, all use the terms "tube member" or "flexible tube member" and "stationary shaft member" suggesting that the "tube member" is the flexible tube member or flexible air hose described in the specification and the "stationary shaft member" is the elongated stationary shaft or simply stationary shaft referred to in the specification. Independent Claim 15, however, in which the term "tubular member" which the Court must construe appears, does not also include the term "stationary shaft member," raising the question as to whether "tubular member" simply means a flexible tube or air hose or something else, and whether, as Plaintiffs' maintain, the tubular member can be flexible, rigid or part flexible and part rigid.

In addition to consulting the specification, the Court is to "consider the patent's prosecution history, if it is in evidence." *Markman*, 52 F.3d at 980. "[L]ike the specification, the prosecution history was created by the patentee in attempting to explain and obtain the patent." *Phillips*, 415 F.3d at 1317. The prosecution history can demonstrate how the inventor understood his invention and whether he limited a claim in the course of prosecution, thereby providing important information as to the meaning of claim language. *See id.*

In this case, the inventor or patentee filed a Preliminary Amendment in which he explained that the term "tubular member" as used in new claims 15, 16 and 17 included a "flexible hose portion" and that "[a]s such a configuration has not been found in the prior art, the new claims have been added *to cover such an assembly without reciting the rigid shaft member as being a separate element from the flexible hose member.*" Preliminary Amendment (Exhibit "2" to Response of Defendants/Counter-Plaintiffs to Plaintiffs' Opening Claim Construction Brief) at p. 000053-54 ("Remarks") (emphasis added). In so stating, the inventor made it clear that "tubular member" as used in claim no. 15 and consistent with the specification (and preferred embodiment) means the combination of a flexible tube or hose and a stationary or rigid shaft, without separately identifying these components. Although the patent examiner rejected all of the claims

included in Anthony L. Ingram's original application and in his preliminary amendment as containing terms without an antecedent basis (claims 1-14) and/or as clearly anticipated by prior art, that is, the Kilmarx patent (claims 1, 2, 9, 10, 15, 16 & 15), and/or for obviousness and unpatentability over the Kilmarx patent (claims 4 & 12), *see* Exhibit "2" to Response of Defendants/Counter-Plaintiffs at pp. 000061-64, claim 15 of the preliminary amendment was eventually accepted by the examiner for the PTO exactly as it appeared in the preliminary amendment with the exception that the language "attachable to the exterior of the hubcap" was substituted for "secured to a hub cap" in the fourth element of claim 15. *See* Amendment (Exhibit "2" to Response of Defendants/Counter-Plaintiffs) at pp. 000070, 000073. Plaintiffs' argument that the limitation "flexible" was removed from claims 1 and 13 by amendment, and that by issuing claims 1, 13 and 15, as amended, without the limitation "flexible" imposed on the element "tubular member" shows that "tubular member" carries its ordinary meaning and does not exclude a tube member that is exclusively rigid, is disingenuous. As is apparent from the Office Action Summary rejecting all claims in Mr. Ingram's patent application as amended by the preliminary amendment, the problem with Mr. Ingram's use of "said flexible tube member" in line 14 of claim 1, use of "said stationary flexible tube member" in line 20 of claim 9 and use of the "said stationary flexible tube" in line 29 of claim 13 was that the applicant had not previously used the precise term following "said" in each of those claims, i.e., each such term lacked an "antecedent basis" in the claim within which it was employed. *See* 2 Patent Law Fundamentals s. 14:13 (2d ed.2007). But in response to the examiner's rejection of those claims because those terms lacked antecedent basis, the applicant, rather than employing those precise terms earlier in each of such claims, simply amended the claims to refer to "said tube member and "said stationary shaft member" (claim 1), to refer to "said flexible tube member" instead of "said stationary flexible tube member" (claim 9) and to refer to "said tube member and stationary shaft member" (claim 13).

Under the doctrine of claim differentiation, "the presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed.Cir.2004). However, the presumption can be overcome if the circumstances suggest a different explanation or the evidence pointing to a different construction is strong. *Id.* In this case, dependent claim 17 states as follows:

The assembly of claim 16 wherein at least a portion of said tubular member is flexible whereby a sealed airflow conduit can be provided between said fitting and said housing when said housing is out of axial alignment with the first fitting.

U.S. Patent No. '645 (Exhibit "1" to Plaintiffs' Opening Claim Construction Brief) at col. 10, lines 61-65.

The specific limitation in claim 17 not found in either claim 15 or claim 16 that "at least a portion of said tubular member is flexible," suggests by negative implication under the doctrine of claim differentiation that that limitation is not present in claim 15, i.e., that the "tubular member" in claim 15 is *not* in part flexible. However, in dependent claim 16 the tubular member is specifically allowed to be "axially translatable with respect to ... [an] o-ring whereby the durability of said tubular member is enhanced and the axial spacing between said first fitting and said housing can be varied," a limitation and/or function not specifically included in independent claim 15 and in dependent claim 17, the inventor emphasized that "a sealed air flow conduit can be provided between said fitting and said housing [as described in the assembly in claim 16] when said housing is out of axial alignment with said first fitting" where "at least a portion of ... [the] tubular member is flexible." Both dependent claims 16 and 17 contain a limitation not included in claim 15- the use of an o-ring as the "annular sealing member" in claim 16 the inventor emphasizes allows accommodation of varying (horizontal or side to side) distances between the first fitting and the housing and

which the inventor emphasizes in claim 17 allows accommodation of axial misalignment (up and down movement) between the first fitting and the housing. Thus, because the limitation in claim 17 that "at least a portion of said tubular member is flexible" is not the *only* meaningful difference between claim 17 and claim 15, the presumption that claim 15 does not have that limitation is not as strong as if that were the only meaningful difference between claim 17 and claim 15. *See Sunrace Roots Entertainment Co. v. SRAM Corp.*, 336 F.3d 1298, 1302-03 (Fed.Cir.2003) (presumption that an independent claim does not have a limitation that is introduced for the first time in a dependent claim "is especially strong when the limitation in dispute is the only meaningful difference between an independent claim and a dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim"). In any event, though, the Court finds that the presumption that the tubular member in claim 15 is not at least in part flexible is rebutted and overcome by the strong evidence that the "tubular member" in claim 15 consists in part of a flexible tube in the form of the inventor's own description of his invention in the specification and the inventor's own specific description of the "tubular member" in claim 15 in the prosecution history, in the "Remarks" section of his Preliminary Amendment.

IT IS SO ORDERED.

W.D.Okla.,2007.

Airgo IP, LLC v. Arvinmeritor, Inc.

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