

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION**

**THE OHIO WILLOW
WOOD COMPANY,**

Plaintiff,

v.

**Case No. 2:04-cv-1223
JUDGE GREGORY L. FROST
Magistrate Judge Abel**

ALPS SOUTH CORPORATION,

Defendant.

OPINION AND ORDER

This is a patent infringement case involving The Ohio Willow Wood Company (“OWW”) and ALPS South Corporation (“ALPS”). The subject matter of the patents at issue is prosthetics. As part of the litigation, the parties have requested that the Court construe various patent language pursuant to *Markman v. Westview Instruments, Incorporated*, 517 U.S. 370 (1996). This claims-construction decision serves that function.

I. BACKGROUND

Given the procedural posture of this litigation, the Court need not and shall not describe the facts in great detail here. Of import is the fact that OWW is the owner of U.S. Patent No. 5,830,237 (“the ‘237 patent”). The company applied for the patent on March 5, 1996, and the patent issued on November 3, 1998. The ‘237 patent is titled “Gel and Cushioning Devices” and involves technology related to coverings for amputees employing a prosthesis. The relevant specification to the patent discloses a device in the form of a cushioned sock that fits over a residuum, or an amputation stump, so as to provide a cushion between the stump and the artificial limb. The sock has an open end for the introduction of the stump and a closed end

opposite the open end. The sock features an inside-the-liner foamed or non-foamed gel coating, preferably comprised of a block copolymer and mineral oil compound, intended to ease discomfort and undesirable noise effects.

Additionally relevant is OWW's U.S. Patent No. 6,406,499 ("the '499 patent"). The company applied for this patent on July 31, 1996. The patent, also titled "Gel and Cushioning Devices," issued on June 18, 2002. The pertinent specification to the '499 patent describes "an open-ended annular sleeve configured to receive a limb of a wearer and having an inside, an outside, a first open end, a second open end and an intermediate position between the first and second opened ends." (Doc. # 1 Ex. A at 1).

On December 27, 2005, OWW instituted this action, alleging that ALPS has infringed on both the '237 and '499 patents. (Doc. # 1). The parties' dispute at this juncture focuses on language contained within several claims of both patents. Regarding the '237 patent, the parties first dispute the meaning of "tube sock shaped" as it appears in Claim 1 as well as in various other dependent claims:

A tube sock-shaped covering for enclosing an amputation stump, said covering having an open end for introduction of said stump and a closed end opposite said open end, said covering comprising fabric in the shape of a tube sock coated on only one side thereof with a foamed or non-foamed gel composition comprising a block copolymer and mineral oil.

(Doc. # 25, Ex. A, col. 13, lines 53-59). Next, the parties dispute the meaning of "coated on only one side" as used within Claim 1. Also at issue are the meanings of several chemical formulas within the '237 patent. The first formula at issue is "styrene isoprene/butadiene block copolymer" and it appears in Claim 6 of the '237 patent: "The tube sock-shaped covering as claimed in claim 1, wherein said block copolymer is a styrene isoprene/butadiene block

copolymer.” (Doc. # 25, Ex. A, col. 14, lines 6-8). Appearing in Claim 14 is the second disputed chemical formula, “styrene-ethylene/butadiene-styrene block copolymer”: “The tube sock-shaped covering as claimed in claim 1, wherein said block copolymer is a styrene-ethylene/butadiene-styrene block copolymer.” (Doc. # 25, Ex. A, col. 14, lines 32-34). The third chemical formula at issue, “styrene-ethylene/propylene block copolymer,” appears in Claim 13 of the ‘237 patent: “The tube sock-shaped covering as claimed in Claim 1, wherein said block copolymer is a styrene-ethylene/propylene block copolymer.”¹ (Doc. # 25, Ex. A, col. 14, lines 30-32).

Turning to the ‘499 patent, the parties disagree as to the proper definition of “annular sleeve” as it is used in Claims 7-11. Each of those claims contain the following sentence relative to that contested term:

An open-ended annular sleeve configured to receive a limb of a wearer and comprising an inside, an outside, a first open end, a second open end, and an intermediate portion end, said annular sleeve comprising a foamed or non-foamed gel composition comprising a block copolymer and mineral oil...

(Doc. # 25, Ex. C, col. 17, lines 10-59). The disagreement continues with respect to the correct meanings of “styrene isoprene-butadiene block copolymer” and “styrene-ethylene/butadiene-styrene block copolymer” which appear in Claim 9:

An open-ended annular sleeve configured to receive a limb of a wearer and comprising an inside, an outside, a first open end, a second open end, and an intermediate portion end, said annular

¹ The same term is used in Claim 9 of the ‘499 patent. (Doc. # 25, Ex. C, col. 17, lines 27-38).

sleeve comprising a foamed or non-foamed gel composition comprising a block copolymer and mineral oil, wherein the elasticity of said sleeve is higher in a circumferential direction than in an axial direction and wherein said block copolymer is selected from the group consisting of styrene-ethylene/propylene, styrene-ethylene/butylene-styrene and styrene isoprene-butadiene block copolymers.

(Doc. # 25, Ex. C, col. 17, lines 27-38). Having identified the disputed terms, the Court now turns to an examination of the parties' proposed definitions.

II. CLAIM CONSTRUCTION

A. Standards Involved

The Federal Circuit has explained that “ [i]t is a “bedrock principle” of patent law that “the claims of a patent define the invention to which the patentee is entitled the right to exclude.” ’ ’ ’ *Varco, L.P. v. Pason Systems USA Corp.*, No. 05-1136, 2006 WL 229926, at *4 (Fed. Cir. Feb. 1, 2006) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004))). Consequently, the meaning and scope of a patent's claims lie at the heart of any patent dispute.

The purpose of a *Markman* hearing is to ascertain the meaning of a patent's claims so that it is clear precisely what has been patented and, by consequence, the protections the patent therefore affords the patent holder. *See Phillips*, 415 F.3d at 1312. *See also Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978 (Fed. Cir. 1995) (“When a court construes the claims of the patent ... the court is defining the federal legal rights created by the patent document”), *aff'd*, 517 U.S. 370 (1996). There is no “rigid algorithm for claim construction.” *Phillips*, 415 F.3d at 1324. Rather, in construing the meaning of a patent's claims, the Court is

guided by a set of principles that the Federal Circuit has described as follows:

The claim terms “ ‘are generally given their ordinary and customary meaning.’ ” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “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.” *Id.* “Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* “In examining the specification for proper context, however, this court will not at any time import limitations from the specification into the claims.” *CollegeNet, Inc. v. Apply Yourself, Inc.*, 418 F.3d 1225, 1231 (Fed. Cir. 2005) (citing *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1326 (Fed. Cir. 2002)).

Varco, L.P., 2006 WL 229926, at *4. The starting point in claim construction therefore lies with the language of the claims themselves. *Purdue Pharma L.P. v. Endo Pharmaceuticals, Inc.*, Nos. 04-1189, 04-1347, & 04-1357, 2006 WL 231480, at *11 (Fed. Cir. Feb. 1, 2006) (citing *Phillips*, 415 F.3d at 1312). In considering a patent’s language, a court should apply the plain meaning rule, presumptively giving claim terms their ordinary, plain meaning. *Teleflex*, 299 F.3d at 1325. A court may, however, depart from a term’s plain meaning if the patentee has acted as a lexicographer or otherwise limited the scope of the invention through a clear disclaimer in the specification or prosecution history. *Phillips*, 415 F.3d at 1316-17.

Of considerable import to claim construction, then, is the intrinsic evidence—the claim language, the specification, and the prosecution history as applicable. *World Kitchen (GHC), LLC v. Zyliss Haushaltwaren AG*, 151 Fed. Appx. 970, 972 (Fed. Cir. 2005) (citing *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001)); *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). When this intrinsic evidence provides an unambiguous description of the scope of the invention, reliance on extrinsic evidence is improper. *Vitronics Corp.*, 90 F.3d at 1582.

But although less significant than intrinsic evidence, extrinsic evidence is still of value to claim construction when necessary. *Phillips*, 415 F.3d at 1317. This latter category encompasses such things as expert and inventor testimony, as well as texts such as treatises and dictionaries. *Id.* (quoting *Markman*, 52 F.3d 980). A court may entertain expert testimony for numerous purposes, such as

to provide background on the technology at issue, to explain how an invention works, to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.

Phillips, 415 F.3d at 1318. The value of expert testimony in regard to claim construction is qualified, however, as an expert cannot offer an opinion of any value that is at odds with the intrinsic evidence of a patent. *Id.* (quoting *Key Pharms. v. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998)); *Playtex Prods., Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 908 n.1 (Fed. Cir. 2005).

Cognizant of these governing principles and having entertained oral and written argument, the Court shall first consider ALPS' motion to exclude testimony before addressing each claim-construction issue.

B. ALPS' motion to exclude

ALPS moves the Court to exclude certain testimony adduced at the Court's January 30-31, 2006 *Markman* hearing. (Doc. # 42). At issue is the testimony of James Colvin ("Colvin") and Bruce Kania ("Kania") as that testimony related to the Luxury Liner® product Kania showed the patent examiner during a meeting among those individuals that took place on February 27, 1998. *Id.*; *see also* Doc. # 45 at 1. During the Court's *Markman* hearing, OWW

was unable to produce the actual liner that Kania showed the examiner. ALPS then filed the instant motion, essentially arguing spoliation; that is, ALPS contends that the testimony about what Kania showed the examiner should be excluded because the actual liner that was shown to the examiner was unable to be located, and was therefore unable to be verified. (Doc. # 42 at 2; Doc. # 46 at 1, 2, 4; Doc. # 47). In response, OWW argues that the issue at hand is what the Luxury Liner® that Kania showed to the examiner looked like. (Doc. # 45 at 2, 6). OWW continues that because Colvin testified that a picture of a Luxury Liner® on a brochure was what was shown to the examiner, the authenticity requirement of Fed. R. 901 is satisfied and the testimony is admissible. *Id.*

The record contains sufficient intrinsic evidence regarding the scope of the inventions at issue to permit the Court to ascertain the meaning of the disputed claim terms without resorting to an examination of extrinsic evidence. (Pl.'s *Markman* Hearing Ex. G at 113). The testimony of Kania and Colvin regarding what they showed the examiner is nothing more than extrinsic evidence. As such, the Court shall ignore the testimony of Kania and Colvin describing the Luxury Liner that they showed the examiner and motion of ALPS is **DENIED** as moot. (Doc. # 42). *See also Vitronics Corp.*, 90 F.3d at 1582.

C. Contested Terms in the '237 Patent

1. "Tube sock-shaped"

The parties first dispute the meaning of “tube sock-shaped” in the ’237 patent.² That language appears in all of the claims of the ’237 patent. OWW proposes that the term means “a relatively long hollow shape, not form-fitted, for covering an amputation stump.” (Doc. # 26 at 11-13). ALPS in turn proposes that the language means “a cylinder with parallel sides, closed at one end and seamed, if at all, only at the closed end.” (Doc. # 23 at 8-10).

The plain language of the patent claim supports much of OWW’s construction. A tube sock is a sock that lacks a shaped or contoured heel; it is not necessarily characterized by parallel sides. Thus, something in the shape of a tube sock is characterized by a generally tubular shape without a contoured “heel.” This plain-language understanding is important, because the Federal Circuit has explained:

In the absence of an express intent to impart a novel meaning to claim terms, an inventor’s claim terms take on their ordinary meaning. [There is] a “heavy presumption” that a claim term carries its ordinary and customary meaning. The ordinary meaning of a claim term may be determined by reviewing a variety of sources, including the claims themselves, other intrinsic evidence including the written description and the prosecution history, and dictionaries and treatises.

Teleflex, 299 F.3d at 1325 (citations omitted). Here, then, the plain meaning of the Claim 1 terms at issue compels a construction reflecting a generally tubular shape, but without requisite parallel sides.³

² This language controls the meaning of “in the shape of a tube sock,” which is also contained in Claim 1. *See* Doc. # 23 at 8.

³ The Court notes that OWW’s proposed construction also includes the clause “for covering an amputation stump.” (Doc. # 26 at 11-13). The parties have asked the Court to construe the terms related to the shape of the covering and not the purpose of the covering. Thus, that portion of OWW’s proposed construction targeting the purpose of the invention is unnecessary, although the Court recognizes that OWW’s additional clause correctly represents the meaning of Claim 1’s “[a] tube sock-shaped covering” language.

This construction is consistent with and supported by the specification. The specification describes a non-form fitting device that would cover residua, which are in turn described as “generally hav[ing] a roughly conical or cubical shape” with recessed areas. (Doc. # 25 Ex. A, col. 2, lines 17-20). Additionally, the file wrapper indicates that the patent’s initial applicants specifically stated that their invention is “distinguished from the form-fitting socks of Kania [U.S. Pat. No. 5,603,122 (“the ‘122 patent”)]” and that “[f]orm-fitting socks like those described in [the ‘122 patent] ... are not presently claimed. Instead, Applicants have focused their attention in this application on tube-sock shaped coverings.” (Doc. # 25 Ex. B at 99.) The examiner specifically referenced a patent by ALPS President Aldo Laghi (U.S. Pat. No. 5,507,834), which neither has parallel sides nor is cylindrical in shape, as presenting *a tube-sock form*. (Doc. # 25 Ex. B at 109) (emphasis added). The office action thus further reinforces OWW’s construction, which permits tapered or unparallel sides.

In contrast, ALPS’ proposed construction is premised on the notion that a “tube sock shape” is *only* a tube with parallel sides and precise positioning of seams. (Doc. # 23 at 8). What APLS overlooks is that a “tube sock shape” is distinguishable from a “sock shape” by the absence of the heel and toe contours that give a regular sock its characteristic “Christmas stocking” shape. The purpose of the invention—a product that would fit typically oddly-shaped residua without specific contouring—mitigates overreaching to adopt the overly restrictive characteristic of parallel sides. (Doc. # 32 at 8). Parallel sides would prove problematic with the often conical shapes found in amputation stumps and contemplated by the patent language. (Doc. # 25 Ex. A, col. 1, lines 9-16; col. 2, lines 17-20).

Additionally, because the ordinary meaning of the words does not implicate seams as

ALPS suggests, the Court can discern no linguistic basis for importing the restrictive seam requirement that ALPS propounds. (Doc. # 23 at 8). The proposed requirement of only having seams in one location is simply not supported by the intrinsic evidence, despite the commonality of seam positioning in any preferred embodiment.

ALPS relies on the drawings to define the specification, which in turn would consequently define the claim. (Doc. # 23 at 9; Doc. # 34 at 5-6). A specification does include accompanying drawings. *Playtex Prods., Inc.*, 400 F.3d at 909 (citing *Vas-Cath, Inc. v. Mahurkaer*, 935 F.2d 1555, 1556 (Fed. Cir. 1991)). And a court should not carelessly exclude a preferred embodiment in construing a claim. *Dow Chem Co. v. Sumitomo Chem. Co.*, 257 F.3d 1364, 1378 (Fed. Cir. 2001) (quoting *Vitronics*, 90 F.3d at 1583). But the Federal Circuit has also repeatedly cautioned against limiting a claim pursuant to a specification or preferred embodiment. *Playtex Prods., Inc.*, 400 F.3d at 907 (collecting cases). *See also Dow Chem Co.*, 257 F.3d at 1378 (“ [c]laims, not the specification embodiments, define the scope of protection’ ”) (quoting *American Permahedge, Inc. v. Barcana, Inc.*, 105 F.3d 1441, 1444 (Fed. Cir. 1997)); *Laitram Corp. v. Cambridge Wire Cloth Co.*, 863 F.2d 855, 865 (Fed. Cir. 1988) (“it is well established that broad claims supported by the written description should not be limited in their interpretation to a preferred embodiment”).

Thus, a preferred embodiment can only import a limitation into a claim when the patentee expressly declares the intent to do so. *Id.* (citing *Karlin Tech., Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 973 (Fed. Cir. 1999)). There is no such express declaration of intent here. The proper construction of the Claim 1 language thus does not limit the shape of the patented device to parallel sides, despite the final art containing parallel sides; to import such a limitation would

be to ignore the actual text of the claim and the context in which it was submitted, examined, and ultimately approved. By invoking a tube-*sock* shape, the patent here claims something *tubular* or *tubelike*, but not necessarily a parallel-shaped *tube*.⁴

In light of the foregoing considerations, the Court construes “tube sock-shaped” as used in the ‘237 patent to mean “a relatively long, hollow shape that is not form-fitted, but that is greater in length than width and closed at one end.”

2. “Coated on only one side”

The parties also disagree over the meaning of “coated on only one side” in the ‘237 patent. OWW asserts that this clause means “the presence of a layer of a substance on a surface of a fabric such that the substance is not substantially observable on the opposing surface of the fabric.” (Doc. # 26 at 14; Doc. # 32 at 10). ALPS counters with the proposed construction of “covered or spread with a layer of something on a single surface without impregnating the fabric.” (Doc. # 23 at 10 and Doc. # 34 at 9).

⁴ The Court notes that during the *Markman* hearing, counsel for ALPS produced numerous tube socks in an attempt to demonstrate a requisite characteristic of parallel sides. Few if any of these socks were actually parallel, insofar as they generally increased in width from top to bottom. When a witness noted this characteristic, ALPS’ counsel explained that the narrow portion of the sock—the portion that would hold the sock up—should be excluded from consideration. But such self-serving, advantageous exclusion defines the shape of a tube sock by ignoring what constitutes essentially one-fourth to almost one-third of an average tube sock. There is no basis for assuming such an unduly restrictive approach, and the patent language does not purport to narrow “tube sock-shaped” to only a portion of a tube sock.

The Court also recognizes that considerable debate has occurred over whether a tube is cylindrical. (Doc. # 23 at 10; Doc. # 32 at 6; Doc. # 34 at 6-7). To the extent that resort to a dictionary is appropriate, the Court notes that the plain meaning of “tube” is “a hollow elongated [usually] cylindrical body.” *Webster’s Third New International Dictionary* 2459 (2002) (abbreviation “usu.” changed to reflect full word). That meaning does not mandate a cylinder, but allows for permissible variations that conform to a cylindrical shape *generally*, such as contemplated in the ‘237 patent.

Neither definition is wholly satisfactory. Taking the proposed constructions out of order, the Court recognizes that the core problem with ALPS' construction is that it imputes to the patent language a restriction on the method of manufacturing—impregnating—without necessity. (Doc. # 34 at 11-12). The company argues that any construction that accepts impregnation would read out of the clause the restrictive “only.” *Id.* But the Court neither reads the patent language nor finds evidence that the patent language was intended to convey that “only” is wholly preclusive of impregnation here. Rather, the term merely targets where the coating lies, as opposed to where portions of the gel might be present that are unobservable to the naked eye.⁵ In other words, “only” limits where the *coating* might be, but permits some of the substance *that does not constitute a complete coating* to be present elsewhere—such as into the fabric and imperceptibly to the other side of the fabric. Moreover, the '237 patent references impregnation as a method within its contemplation. (Doc. # 25, Ex. A, col. 9, line 54). ALPS' proposed restriction thus ignores that the patent language targets a statement of the product's condition following manufacture. The Court declines to impose a process limitation on the patent claims. *See Cordis Corp. v. Medtronic Ave., Inc.*, 339 F.3d 1352, 1357 (Fed. Cir. 2003) (citing *Vanguard Prods. Corp. v. Parker Hannifin Corp.*, 234 F.3d 1370, 1372 (Fed. Cir. 2000) (holding that a product description does not “designate a specific manufacturing process” so that a referenced “method of manufacture, even when cited as advantageous, does not of itself convert product claims into claims limited to a particular process ”)). *See also Anheuser-Busch Cos. v. Crown*

⁵ ALPS reads the patent reference impregnation *or* coated in the disjunctive, but fails to credit that impregnation could produce a coating on one side. (Doc. # 23 at 10; Doc. # 34 at 9). In other words, the patent recognizes that there are two methods of production that can produce the same end result on one side: a coating.

Cork & Seal Techs. Corp., 121 Fed. Appx. 388, 393 (Fed. Cir. 2004). A one-side only coating does not imply any particular method of manufacture. *Cf. AFG Industries, Inc. v. Cardinal IG Co., Inc.*, 375 F.3d 1367, 1372-73 (Fed. Cir. 2004) (“Much like ‘multiple embossed patterns’ ... the term ‘layer’ in the ‘532 patent does not require any particular method of manufacture”). ALPS’ proposed construction is therefore at odds with the teachings of the record.

However, the Court does not find OWW’s inclusion of “substantially” in its proposed construction to be palatable. (Doc. # 26 at 14; Doc. # 32 at 10). The parties dispute how to measure what amount of gel can be present on the opposing fabric surface. The debate is potentially confounding; “substantially” is a term of approximation that necessitates a difficult factual determination. *Playtex Prods., Inc.*, 400 F.3d at 908. But the debate is also a red herring that draws focus from the actual language and meaning of the patent to a term introduced by OWW without textual support or necessity. Of note is that the patent examiner stated that the device featured “a gel coat on one side but no observable penetration of the gel through the fabric and onto the opposite side.” (Doc. # 25, Ex. B, at 135). This is the construction held by the examiner,⁶ this is the plain meaning that produced an approved patent, and it is this understanding that aids the Court in its claim construction. Introducing the additional qualifier “substantially” to the construction would only serve to invite unnecessary and unwarranted

⁶ In making its impregnation argument, ALPS asserts that the examiner’s reasons do not necessarily limit a claim. (Doc. # 34 at 10). This contention is correct. *See Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1345 (Fed. Cir. 2005). But the Federal Circuit has also made clear that “[s]tatements about a claim term made by an examiner during prosecution of an application may be evidence of how one of skill in the art understood the term at the time the application was filed.” *Id.* at 1347. Rather than amending the claim, the examiner’s remarks here serve only to assist the Court in construing what one of ordinary skill in the art would understand the language at issue to mean. Thus, the impregnation issue is not controlling and the request for inclusion of “substantially” is unwarranted here.

ambiguity and debate.

Thus, the Court concludes that what was sought and what was approved in the ‘237 patent’s use of the words “coated on only one side” is a clause meaning “the presence of a layer of a substance on a surface of a fabric, with no observable penetration of the substance onto the opposing surface of the fabric.”

D. The Meaning of “Annular Sleeve” in the ‘499 Patent

The phrase “annular sleeve” is present in Claims 7-11 of the ‘499 patent.⁷ OWW proposes that the phrase means “an elongated covering with a generally ring-shaped cross section.” (Doc. # 32 at 13).⁸ ALPS’ definition describes the phrase as “a tubular piece for covering a part of the body that is in the shape of a ring or cylinder with parallel sides.” (Doc. # 23 at 18). Thus, the key dispute between the parties is whether the definition should include “parallel sides.”

Unfortunately for ALPS, a review of the intrinsic evidence reveals its proposal is unduly limiting for several reasons. First, the word “annular” ordinarily imparts a meaning of “relating to, or forming, a ring.” Merriam Webster’s Collegiate Dictionary 47 (10th ed. 1995). *See also*

⁷ The relevant language provides:

An open-ended annular sleeve configured to receive a limb of a wearer and comprising an inside, an outside, a first open end, a second open end, and an intermediate portion end, said annular sleeve comprising a foamed or non-foamed gel composition comprising a block copolymer and mineral oil...

(Doc. # 25, Ex. C, col. 17, lines 10-59).

⁸ OWW’s opening brief proposes “an elongate covering with a generally ring-shaped cross section” as the definition for annular sleeve. (Doc. # 26 at 15).

Teleflex, 299 F.3d at 1325 (holding that ordinary meaning of claim term may be determined by referring to intrinsic evidence in the form of dictionaries). Perhaps to enforce that meaning, the patent's specification indicates that the sleeve "may have a conical (i.e., tapered) shape" (Doc. # 25 Ex. C, col. 7, lines 66-67; col. 8, lines 1-12). Cones do not have parallel sides. Furthermore, the specification states that the sleeve may be "any size" and have "any diameter." (Doc. # 25 Ex. C col. 8, lines 3, 4). And, the specification provides that the annular sleeve may have a "shape with a smaller diameter distally than proximally or smaller diameter distally and proximally as compared to a central diameter so as to grip and hold the prosthetic device or residuum at the smaller diameter end(s)." (Doc. # 25 Ex. C, col. 8, lines 7-12). Clearly, this language indicates that the annular sleeve may not have parallel sides.

It is true that the description mentions that the annular sleeve is "generally cylinder- or band shaped." (Doc. # 25 Ex. C, col. 7, lines 66-67). Cylinders normally have parallel sides. However, the use of the term "generally" does not mandate that the sleeve must always be in the shape of the cylinder having parallel sides. Additionally, a clear intent to limit the claim is absent; thus, the Court shall construe "generally" expansively so as not to require the sleeve to be in the shape of a cylinder or band and have parallel sides. *See PrimaTek II*, 412 F.3d at 1289. The Court therefore holds that the patentee did not limit the sleeves in the '499 patent to those with parallel sides, and adopts OWW's proposed definition of annular sleeve: "an elongated covering with a generally ring-shaped cross section." (Doc. # 32 at 13).

E. Chemical Definitions

The parties' final dispute over language contained within both the '237 and '499 patents involves the construction to be given to five block copolymers referenced in the patents: (1)

styrene isoprene/butadiene block copolymer (Claim in 6 the '237 patent; Claim 9 in the '499 patent),⁹ (2) styrene-ethylene/propylene block copolymer (Claim 13 in the '237 patent; Claim 9 in the '499 patent), (3) styrene-ethylene/butadiene-styrene block copolymer (Claim 14 in the '237 patent), (4) styrene-ethylene/butylene-styrene (Claim 9 in the '499 patent). The patents do not express these claimed block copolymers in chemical formulas. The parties dispute the correct applicable chemical formulas as well as whether the expression of formulas is necessary or appropriate. (Doc. # 23 at 11-15; Doc. # 26 at 15-17; Doc. # 32 at 16-19; Doc. # 34 at 15-17).

The Federal Circuit has recognized that “patent documents are meant to be ‘a concise statement for persons in the field.’ ” *Phillips*, 415 F.3d at 1313 (quoting *Verve, LLC v. Crane Cams, Inc.*, 311 F.3d 1116, 1119 (Fed. Cir. 2002)). The testimony of ALPS’ expert, Jerry L. Atwood, not only targets such concision, but in fact also demands a restrictive approach exceeding mere concision. Atwood’s main premise is that although one of ordinary skill in the field would read the patent language to mean the dominant form of the block copolymers, there is nonetheless room for error in the expression of that form that the use of formulas would remedy.

The approach Atwood advocates would read limitations into the claim terms, but a court should not read limitations into claim terms from the written description unless the patentee has expressly limited the terms to a special meaning within the written description. The Federal Circuit has explained that “[i]t is improper for a court to add ‘extraneous’ limitations to a claim,

⁹ The parties agree that the Court’s definition for styrene isoprene/butadiene found in the ‘237 patent will serve as the Court’s definition of styrene isoprene-butadiene found in the ‘499 patent. (Doc. # 32 at 17).

that is, limitations added ‘wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim.’ ” *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 950 (Fed. Cir. 1993) (quoting *E.I. Du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir.), *cert. denied*, 488 U.S. 986 (1988)).

In *Hoganas*, for example, the court therefore declined to add a *size* limitation to a claim that involved *shape*—and that neither included a size limitation nor required such a construction. Similarly, because the claim at issue here does not require or warrant a limitation on the form of compound involved, the Court should not read any specification limitation into the claim. *Specialty Composites v. Cabot Corp.*, 845 F.2d 981, 987 (Fed. Cir. 1988). In other words, the patent claims cover the breadth of compounds satisfying the patent language; the compounds can be in a variety of forms that include the dominant form and more uncommon forms.

The Court therefore agrees with OWW that it would be in error to introduce a precise chemical formula into a patent that already implicitly references *that* formula to one of ordinary skill in the art as well as encompassing *more* than that specific formula. As OWW asserts, ALPS’ “definitions for the block copolymers are restrictive as they fail to account for known variations in chemical structure.” (Doc. # 32 at 16). The only things referenced in the language of the patents are characteristics or components, not specific formulas. (Doc. # 25 Exs. A, C).

Adopting such formula-driven definitions is therefore at best unnecessary and at worst unduly limiting. Contrary to ALPS’ contention, a jury can, relying upon each side’s experts, determine whether infringement has occurred by using the definitions described below without encroaching on this Court’s claim-construction role. (Doc. # 34 at 15). For example, relying on the constructions set forth below, experts can testify to the jury whether a compound falls within

or outside the acceptable scope of possibilities encompassed by the given definitions, *including* possible variations. In contrast, if the Court were to “define” the monomers-forming post-polymerization-polymers via chemical formulas, it would necessarily and impermissibly narrow the scope of the broader patent language to exclude variations.

Accordingly, the Court declines to construe the claim language as warranting a specific chemical formula, and instead finds that OWW’s proposed constructions properly reflect the patents:

(1) “styrene isoprene/butadiene block copolymer” as used in Claim 6 of the ‘237 patent and Claim 9 of the ‘499 patent means “a block copolymer wherein the first block (A) is formed from styrene and the second block (B) is formed from a mixture of isoprene and butadiene.”

(2) “styrene-ethylene/propylene block copolymer” as used in Claim 13 of the ‘237 patent and Claim 9 of the ‘499 patent means “a block copolymer wherein the first block (A) is formed from styrene and the second block (B) is formed from a mixture of ethylene and propylene.”

(3) “styrene-ethylene/butadiene-styrene block copolymer” as used in Claim 14 of the ‘237 patent means “a block copolymer wherein the first and third blocks (A) are formed from styrene and the second block (B) is formed from a mixture of ethylene and butadiene.”

(4) “styrene-ethylene/butylene-styrene block copolymer” as used in Claim 9 of the ‘499 patent means “a block copolymer wherein the first and third blocks (A) are formed from styrene and the second block (B) is formed form a mixture of ethylene and butylene.”

III. Conclusion

The Court concludes that the foregoing claim constructions control. The parties shall

therefore proceed in a manner consistent with the conclusions of this Opinion and Order.

ALPS' motion to exclude (Doc. # 42) is **DENIED**.

IT IS SO ORDERED.

/s/ Gregory L. Frost

**GREGORY L. FROST
UNITED STATES DISTRICT JUDGE**