United States District Court,
D. Delaware.

PARKER-HANNIFIN CORPORATION,
Plaintiff.
v.
ZIPPERTUBING (JAPAN), LTD,
Defendant.
Parker-Hannifin Corporation,
Plaintiff.
v.
Seiren Co., Ltd,
Defendant.

Civil Action No. 06-751-MPT

Nov. 18, 2008.

Francis DiGiovanni, Connolly, Bove, Lodge & Hutz, Wilmington, DE, Steven A. Nash, for Plaintiff.

William J. Marsden, Jr., Fish & Richardson, P.C., Wilmington, DE, David Loretto, John D. Garretson, John B. Pegram, Fish & Richardson P.C. New York, NY, Michael T. Zoppo, for Defendant.

Francis Digiovanni, Rudolf E. Hutz, Connolly, Bove, Lodge & Hutz, Julia Heaney, Morris, Nichols, Arsht & Tunnell, Wilmington, DE, Steven A. Nash, for Plaintiff.

Jack B. Blumenfeld, Julia Heaney, Leslie A. Polizoti, Paul Saindon, Morris, Nichols, Arsht & Tunnell LLP, Francis Digiovanni, Connolly, Bove, Lodge & Hutz, Wilmington, DE, Michael J. Caridi, Scott M. Daniels, Westerman, Hattori, Daniels & Adrian, LLP, Washington, DC, for Defendant.

MEMORANDUM ORDER

MARY PATRICIA THYNGE**, United States Magistrate Judge.**

INTRODUCTION

The two matters are patent cases. Parker-Hannifan Corporation and Parker Intangibles LLC ("Parker") sued Zippertubing (Japan), Ltd. ("Zippertubing") and Seiren Co. ("Seiren") FN1 for infringement of five related U.S. Patents: 6,248,393 ("the '393 patent"), 6,387,523 ("the '523 patent"), 6,521,348 ("the ' 348 patent"), 6,716,536 ("the '536 patent"), and 6,777,095 ("the '095 patent"). Of those patents, the parties dispute the meaning of certain terms of the '348 patent, the '536 patent and the '095 patent.FN2 On August 1, 2008, the court conducted a MarkmanFN3 hearing on the parties' respective constructions of several disputed terms of the asserted claims. This order sets forth the court's construction of those claims.

FN1. On September 30, 2008 the court granted Parker's motion to dismiss its action against Seiren with prejudice. C.A. No. 07-104-MPT; D.I. 70.

FN2. At oral argument Parker stated that it was not pursuing infringement claims with regard to the '393 and '523 patents and, therefore, no construction of terms were required for those patents.

FN3. Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995).

THE COURT"S CLAIM CONSTRUCTION

At Wilmington, this 18th day of November, 2008, having reviewed the papers submitted with the parties' proposed claim constructions, heard oral argument, and having considered all of the parties arguments;

IT IS ORDERED, ADJUDGED, and DECREED that the disputed claim language in the asserted claims of the patents-in-suit, as identified by the parties, shall be construed consistent with the tenets of claim construction set forth by the United States Court of Appeals for the Federal Circuit in *Phillips v. AWH Corp.*,FN4 as follows:

FN4. 415 F.3d 1303 (Fed.Cir.2005).

1. "which is not V-0 rated" ('348 patent)

Parker's proposed construction is "the core member would not be accorded a V-0 rating under UL Standard No. 94 were the core member to be submitted to UL for testing." FN5

FN5. The parties' respective proposed claim constructions are set forth in their Joint Claim Construction Chart (D.I.39).

Zippertubing's proposed construction is "the core member has not received a V-0 rating under Underwriters Laboratories (UL) Standard No. 94."

The court adopts Parker's proposed construction and determines this phrase means: "the core member would not be accorded a V-0 rating under UL Standard No. 94 were the core member to be submitted to UL for testing." Zippertubing's construction would cover core members that have not been UL tested, but would receive a V-0 rating if tested. The court does not read claim 1 as covering such cores. Claim one requires a "core member which is not V-0 rated under Underwriter's Laboratories (UL) Standard No. 94" and also requires that a "*flame retardant layer* being effective to afford said gasket a flame class rating of V-0 under ... [UL] Standard No. 94." Based on the specification's description of the type of materials suggested for formation of the core the court finds that a "core member which is not V-0 rated" does not cover cores that are not tested but *would* receive a V-0 rating if tested.FN6 Therefore, Zippertubing's proposed construction is rejected.

FN6. *See, e.g.,* '348 patent, 7:45-53 ("For affording gap-filling capabilities, it is preferred that core member 52 is provided to be compliant over a wide range of temperatures, and to exhibit good compression-relaxation hysteresis even after repeated cyclings or long compressive dwells. Core member 52 therefore may be formed of a foamed elastomeric thermoplastic such as a polyethylene, polypropylene, polypropylene-EPDM blend, butadiene, styrene-butadiene, nitrile, chlorosulfonate, or a foamed neoprene, urethane, or silicone."); '348 patent, 2:64-3:2 ("[I]t has long been recognized that foamed polymeric materials are flammable and, in certain circumstances, may present a fire hazard. Owing to their cellular structure, high organic content, and surface area, most foam materials are subject to relatively rapid decomposition upon exposure to fire or high temperatures.").

2. "exterior surface" ('348, '536, and '095 patents)

Parker contends that the plain and ordinary meaning applies and the phrase should be construed as meaning "the exteriorly facing surface of the referenced article."

Zippertubing's proposed construction is "the outer face, outside or exterior boundary of the fabric member."

The court adopts Zippertubing's proposed construction and determines this phrase means: "the exteriorly facing surface of the referenced article." FN7 The court rejects Parker's construction which merely repeats "exteriorly facing surface" to define "exterior surface." This claim term is not limited to a direction, "exterior," but more specifically an exterior *surface* . The court agrees with Zippertubing that the concept of a "boundary" is necessary to sufficiently construe the limitation "thickness dimension," which follows below.

FN7. *See, e.g.,* '348 patent, Fig. 2; 4:63-66 ("[T]he terms ... 'inner' or 'interior' and 'outer' or 'exterior' referring, respectively, to directions toward and away from the center of the referenced element ...."); 5:42-53 ("Fabric member has at least an electrically-conductive first side, 16, and a conductive or nonconductive second side, 18, defining a thickness dimension .... By 'electrically-conductive," it is meant that the fabric may be rendered conductive ... by reason of its being constructed of electrically-conductive wire, monofilaments, yarns or other fibers or, alternatively, by reason of a treatment such as a plating or sputtering being applied to non-conductive fibers to provide and electrically-conductive layer thereon."); 10:59-63 (Claim 1) ("[S]aid *fabric member having* an *interior surface* disposed facing the outer surface of said core member and an *oppositely-facing, exterior surface* ...." (emphasis added)).

3. "thickness dimension" ('348, '536, and '095 patents)

Parker's proposed construction is "the distance between the exterior surface and the interior surface of the fabric member."

Zippertubing's construction is "the dimension represented by 't," in Fig. 2."

The court adopts Parker's proposed construction and determines this phrase means: "the distance between the exterior surface and the interior surface of the fabric member." Claim 1 of the '348 patent defines the "thickness dimension" limitation: "[S]aid fabric member having an *interior surface* disposed facing the outer surface of said core member and an oppositely-facing exterior surface ... and the exterior surface defining with the interior surface a thickness dimension of the fabric member therebetween." FN8 Parker's proposed

construction is consistent with this definition. Although the specification recites, with reference to describing Figure 2, that the "[f]abric member has at lease an electrically-conductive first side, 16, and a conductive or non-conductive second side, 18, *defining a thickness dimension, referenced at 't,' in the cross-sectional view of Fig. 2,*"FN9 the court finds that the specification does not limit the "thickness dimension" element to that illustrated in figure 2, and that Zippertubing's proposed construction would add confusion to the finder of fact.

FN8. '348 patent, 10:59-65 (Claim 1) (emphasis added).

FN9. '348 patent, 5:42-45 (emphasis added).

4. "coating at least a portion of the interior surface" ('348, '536, and '095 patents)

Parker contends that the plain and ordinary meaning applies and that this phase should be construed as meaning: "a layer having flame retardant properties covers at least a portion or the entirety of the interior surface of the fabric member."

Zippertubing's proposed construction is "the flame retardant layer is directly applied to the interior surface of the fabric member, covering at least a portion of that interior surface."

The court adopts Zippertubing's proposed construction and determines this phrase means: "the flame retardant layer is directly applied to the interior surface of the fabric member, covering at least a portion of that interior surface." The claim language requires that "a flame retardant layer coating at least a portion of the interior *surface* of said fabric member." FN10 Here, the court agrees that Zippertubing's proposed construction, requiring the flame retardant layer to be "directly applied" to the interior surface of the fabric member is correct. The court's construction of "exterior *surface*" includes the boundary concept. This likewise applies to the interior *surface*. Although Parker's proposed construction may not be inconsistent with Zippertubing's proposed construction in light of the court's "exterior surface" construction, Zippertubing's construction clarifies that the coating is applied directly to the interior surface of the fabric member and not to a fabric member having other intervening material between the fabric member and the flame retardant layer. The specification does not suggest the application of flame retardant to such intermediate layer or material.FN11 The court agrees with Zippertubing that such intermediate substance "would presumably fill the pores of the fabric, and thus prevent the claimed, ... partial penetration of the flame retardant" and also that "[i]f the claims contemplated anything other than direct application, the word 'surface' would be unnecessary." FN12 Zippertubing's proposed construction specifies that it is the interior *surface* of *the fabric member* that is being coated and is thus adopted by the court.

FN10. *See, e.g.,* '348 patent, Claim 1.

FN11. *See, e.g.,* '348 patent, 3:34-41 ("In having a layer of a flame retardant coating applied to *one side of an electrically-conductive generally porous fabric*.... Advantageously, as the flame retardant layer may be wet coated *on the fabric* without appreciable bleed through .... (emphasis added)); '348 patent, 6:35-38 ("Returning to FIGS. 1 and 2, coating member 14 preferably is formed from a curable layer of a fluent, flame retardant resin or other composition which is wet coated *onto the second side* 18 *of fabric member*

12." (emphasis added)); '348 patent, 8:62-64 ("[A] resin composition may be coated and cured on one side [of] *the fabric member 12 by a direct wet process* such as knife over roll or slot die." (emphasis added)); '348 patent, 10:8-11 ("An inspection of the coated fabric cloth revealed a coating penetration depth ... providing acceptable mechanical retention and/or adhesion of *the coating onto the fabric surface*." (emphasis added)).

FN12. D.I. 44 at 11.

5. "being/is effective to afford said gasket a flame class rating of V-0" ('348, '536, and '095 patents)

Parker's proposed construction is "a layer having flame retardant properties provides the overall gasket, in which the layer is found, with flame retardant properties that are sufficient so that the gasket has been accorded a V-0 rating by UL after testing for flammability under UL Standard No. 94."

Zippertubing's proposed construction is "the gasket would receive a V-0 rating if it were tested according to Underwriter's Laboratories (UL) Standard No. 94."

The court adopts Parker's proposed construction and determines this phrase means: "a layer having flame retardant properties provides the overall gasket, in which the layer is found, with flame retardant properties that are sufficient so that the gasket has been accorded a V-0 rating by UL after testing for flammability under UL Standard No. 94."

The abstract of the patent states three aspects of the construction of "[a] flame retardant, electromagnetic interference (EMI) shielding gasket construction" described and claimed therein: that being "[1] a resilient core member formed of a foamed elastomeric material, [2] an electrically-conductive fabric member surrounding the outer surface of the core member and [3] a flame retardant layer coating at least a portion of the interior surface of the fabric member. *The flame retardant layer* is effective to afford the *gasket construction* with a flame class rating of V-0 under Underwriter's Laboratories (UL) Standard No. 94." FN13 The court agrees with Parker that "effective to afford" is mandatory, rather than permissive, in requiring a V-0 rating be accorded. Further, the specification indicates that actual testing of the claimed invention is contemplated.FN14 Parker's construction makes clear that it is the "flame retardant layer" which imparts the flame retardancy to the gasket.

FN13. '348 patent, Abstract (emphasis added).

FN14. *See, e.g.,* '348 patent, 2:46-61 ("Many electronic devices, including PC's and communication equipment, must not only comply with certain FCC requirements, but also must ... be approved under certain Underwriter's Laboratories ... standards for flame retardancy. In this regard, if each of the individual components within an electronic device is *UL approved,* then the device itself does not require separate approval. Ensuring UL approval for each component therefore reduces the cost of compliance for the manufacturer, and ultimately may result in cheaper goods for the consumer. For EMI shielding gaskets, however, such gaskets must be made flame retardant, i.e., *achieving a rating of V-0 under UL Std. No. 94 ...* without compromising the electrical conductivity necessary for meeting EMI shielding requirements." (emphasis added)); 10:20-41 ("Samples also *were provided,* as jacketed over a polyurethane foam core in an

EMI shielding gasket construction, *for flame testing* by Underwriters Laboratories .... A flame class rating of V-0 under UL94 *was assigned* at a minimum thickness of 1.00 mm. The gasket construction therefore was *found to be compliant* with the applicable UL requirements, and was approved to bear the 'UL' certification mark. The foregoing results confirm that the EMI shielding material *of the present invention affords UL94 V-0 protection* when used as a jacketing in a fabric-over-foam gasket construction.... Such a thin coating layer, while *being sufficient to provide UL94 V-0 protection* ... facilitates the fabrication of *UL94 V-0 compliant gaskets* ...." (emphasis added)).

6. "penetrating ... such that the exterior surface remains electrically conductive" ('348 and '095 patents)

Parker's proposed construction is "the coating enters into the fabric to a depth which is between the interior surface and the exterior surface such that the electrical conductivity of the exterior surface is not appreciably affected."

Zippertubing's proposed construction is "the flame retardant layer does not penetrate the fabric member to an extent that would cause the exterior surface of the fabric member to have a surface resistivity greater than about 0.1 (omega)>>>/sq."

The court adopts Parker's proposed construction and determines the phrase means: "the coating enters into the fabric to a depth which is between the interior surface and the exterior surface such that the electrical conductivity of the exterior surface is not appreciably affected."

The court rejects Zippertubing's proposed construction. First, the claims do not contain the numerical limitation of Zippertubing's proposed constructions, but merely require that the exterior surface of the fabric member remain electrically conductive. The court disagrees with Zippertubing's contention that the patentee acted as his own lexicographer by reciting in the specification that "[b]y 'electrically-conductive,' it is meant that the fabric may be rendered conductive, i.e., to a surface resistivity of about 0.1 (omega)>>>/sq. or less ...," FN15

FN15. '348 patent, 5:46-48. To adopt Zippertubing's proposed construction, the court would be improperly importing a limitation concerning a particular embodiment where neither the claims, nor the specification as a whole, require such limitation.

The court also disagrees with Zippertubing that Parker's proposed construction is impermissibly vague in light of the requirement that the electrical conductivity of the exterior surface not be *appreciably affected*. According to the claim language, "the exterior surface of [the] fabric member *remains electrically conductive*." Parker's proposed construction is consistent with that limitation, as well as, the specification.FN16

FN16. *See, e.g.,* '348 patent, 3:39-44 ("Advantageously, as the flame retardant layer may be wet coated on the fabric without appreciable bleed through, a ... coating layer may be provided on one side *without compromising the electrical surface conductivity of the other side*." (emphasis added)).

7. "between about 30-50% by weight" ('348 patent)

Parker's proposed construction is "the flame retardant layer when applied contains between about 30% and about 50% of flame retardant additives."

Zippertubing contends that the specification cannot support a construction of this phrase and, therefore, the phrase is indefinite under 35 U.S.C. s. 112.

Section 112 paragraph 2 of the Patent Act requires that a patent specification conclude with one or more claims "particularly pointing out and distinctly claiming subject matter which the applicant regards as his invention." We have stated the standard for assessing whether a patent claim is sufficiently definite to satisfy the statutory requirement as follows: If one skilled in the art would understand the bounds of the claim when read in light of the specification, then the claim satisfies section 112 paragraph 2. FN17

FN17. *Exxon Research and Engineering Co. v. U.S.,* 365 F.3d 1371, 1375 (Fed.Cir.2001) (citations omitted).

"The party seeking to prove indefiniteness bears the burden of showing by clear and convincing evidence that one of ordinary skill in the art would not understand what is included within the claims" of the patents in suit. FN18

FN18. Wesley Jessen Corp. v. Bausch & Lomb, Inc., 209 F.Supp.2d 348, 399-400 (D.Del.2002).

Zippertubing is, in effect, asking for summary judgment of indefiniteness of this, and the following two claim terms. However, in this matter, the parties requested the court conduct an early claim construction hearing and that the parties would later exchange expert reports and submit any dispositive motions. Although Zippertubing maintained at the *Markman* hearing that it is appropriate to address indefiniteness at this stage, it acknowledged that the issue could also be addressed later.FN19 The court also notes that the cases cited by Zippertubing in support of its indefiniteness arguments were primarily appeals from a grant of summary judgment where the court was presumably able to consider evidence other than that submitted in support of claim construction concerning what one of ordinary skill in the art would understand as being included within the claims. At oral argument, Zippertubing confirmed that the only evidence of indefiniteness it relied upon is the specification (and prosecution history) and Parker's arguments for construction of the "by weight" claims. At this stage of the litigation, the court does not believe Zippertubing has presented clear and convincing evidence that would warrant the harsh sanction of a finding of indefiniteness.FN20

FN19. At that hearing, Zippertubing also stated that "[t]he Federal Circuit has said that even though you can put words on a claim term and give it a facial definition, if there is an underlying ambiguity that you could then grant summary judgment at a later stage." Zippertubing also argued "if we did not raise the indefiniteness issue now and just try to say, well, there is a claim construction, and then raised it later, I am sure Parker-Hannifin would claim, well, they didn't raise it in claim construction, how could it possibly be indefinite?"

FN20. "If the meaning of the claim is discernible, even though the task may be formidable and the

conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." *Exxon,* 265 F.3d at 1375. "By finding claims indefinite only if reasonable efforts at claim construction prove futile, we accord respect to the statutory presumption of patent validity .... and we protect the inventive contribution of patentees, even when the drafting of their patents has been less than ideal." *Id.; see also Halliburton,* 514 F.3d at 1249-50 (holding that an accused infringer must show by clear and convincing evidence that "a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification and the prosecution history, as well as her knowledge of the relevant art area.").

Consequently, the court adopts Parker's proposed construction and determines this phrase means: "the flame retardant layer when applied contains between about 30% and about 50% of flame retardant additives." FN21

FN21. Parker supports its proposed construction with the description in the specification that the flame retardant layer can be formed from an aqueous emulsion. "Returning to FIGS. 1 and 2, coating member 14 preferably is formed from a curable layer of a fluent, flame retardant resin or other composition which is wet coated onto the second side 18 of fabric member 12." '348 patent, 6:35-38. "The flame retardant composition preferably is formulated as an aqueous emulsion of an acrylic latex emulsion which is adjustable to a total solids of about 60% and a Brookfield viscosity (# 5 spindle, 4 speed) of between about 40,000-60,000 cps, at a density of about 10 lbs per gallon (1.8 g/cm.sup.3). Flame retardancy may be imparted by loading the emulsion with between about 30-50% by weight of one or more conventional flame retardant additives such as aluminum hydrate, antimony trioxide, phosphate esters, or halogenated compounds such as polybrominated diphenyl oxides." '348 patent, 60-7:2. Parker states that "the emulsion is applied to the fabric member as a liquid, and then cured to form a dried film," citing '348 patent, 8:61-62 (emulsion is coated and cured); '348 patent, 9:13-34 (describing application of the liquid coating); and '348 patent, 9:34-42 (describing curing of the applied coating). In light of the cited portions of the specification, Parker maintains that one of ordinary skill in the art would understand that "about 30-50% by weight" and "at least about 30% by weight" refers to the amount of flame retardant additive in the emulsion, i.e., the form of the coating at the time it is applied.

8. "at least about 30% by weight" ('536 patent)

Parker's proposed construction is "the flame retardant layer when applied contains at least about 30% of flame retardant additives."

Zippertubing contends that the specification cannot support a construction of this phrase and, therefore, the phrase is indefinite under 35 U.S.C. s. 112.

For the reasons discussed above, the court declines Zippertubing's request that this phrase be held indefinite and adopts Parker's proposed construction and determines this phrase means: "the flame retardant layer when applied contains at least about 30% of flame retardant additives." FN22

FN22. Parker's argument and support for its construction of this term parallel those recited in footnote 21, above.

9. "at least about 50% by dry weight" ('095 patent)

Parker's proposed construction is "the flame retardant layer when dried or otherwise hardened contains at least about 50% of flame retardant additives."

Zippertubing contends that the specification cannot support a construction of this phrase and, therefore, the phrase is indefinite under 35 U.S.C. s. 112.

For the reasons discussed above, the court declines Zippertubing's request that this phrase be held indefinite and adopts Parker's proposed construction and determines this phrase means: "the flame retardant layer when dried or otherwise hardened contains at least about 50% of flame retardant additives." FN23

FN23. Parker avers that one of ordinary skill in the art would appreciate the distinction between "at least about 50% by dry weight" and the previous two "by weight" limitations. It contends that the specification references cited in support of those prior limitations, describing "loading the emulsion with between about 30-50% by weight of one or more conventional flame retardant additives," indicate that the amount of flame retardant additives by dry weight would be at least about 50%. This contention is purportedly supported in a Preliminary Amendment submitted with the application for the '095 patent which recites: "In this regard, the specification describes the 30-50% range is based on the total weight of the emulsion. With the emulsion having a total solids content of about 60%, such 30-50% range therefore corresponds to a dry weight basis in the dried or otherwise cured film of the layer, of between about 50-83%. For example, at 60% total solids, 100 parts by total weight of the emulsion contains 30-50 parts of the one or more flame retardant additives, and 60 parts by weight solids. On a solid or dry basis, i.e., with the 40 parts water being removed, the total weight of the layer is now 60 parts with between about 30-50 parts thereof, i.e., about 50-83%, being the additive composition or concentration." D.I. 40 at 25.

D.Del.,2008.
Parker-Hannifin Corp. v. Zippertubing (Japan), Ltd.