United States District Court,
W.D. Washington.

TALTECH LIMITED,
Plaintiff.
v.
ESQUEL ENTERPRISES LTD,
Defendant.

No. C04-974Z

Jan. 19, 2006.

Background: Owner of patents for "wash-n-wear" dress shirt product, and method of producing "pucker free" seams in such shirts, sued competitor for infringement.

Holdings: Construing claims, the District Court, Zilly, J., held that:
(1) "set stitch" was stitch that joined at least one garment component and bonding element together, or at least two garment components together, to define their relationship in garment seam, but did not pass through outer garment component in finished seam;
(2) requirement that garment components and bonding elements "abut" meant that such parts had to touch;
(3) requirement that garment components be placed in "adjacent" or "juxtaposed" relationship meant that they had to be next to each other, but not necessarily touching; and
(4) claimed steps had to be performed in recited order only to extent that particular one was logically dependent on prior step having been performed.

Claims construed.

5,568,779, 5,590,615. Construed.

Bradford E. Kile, Charles D. Reed, Joel Davidow, Robert J. McManus, Veronica Susana Ascarrunz, Kile Goekjian Reed & McManus, Washington, DC, Brian G. Bodine, Davis Wright Tremaine, Seattle, WA, for Plaintiff.

Gregory F. Wesner, Hugh Frederick Bangasser, Preston Gates & Ellis LLP, Seattle, WA, Joseph H. Paquin, Jr., Steven H. Hoeft, McDermott Will & Emery, Chicago, IL, Matthew E. Leno, McDermott Will & Emery, Boston, MA, for Defendant.

ORDER

ZILLY**, District Judge.**

I. *INTRODUCTION*

This matter comes before the Court 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 577 (1996), to construe various terms of the patents at issue in this case. The Court held a hearing on December 12, 2005, and asked for supplemental briefing on certain terms. The Court has reviewed all of the briefing, the records and files herein, and now enters the following Order.

II. *DISCUSSION*

A. *Background*

On April 29, 2004, Esquel Enterprises Ltd. filed a complaint for declaratory judgment and other relief against TAL Apparel Limited and Taltech Limited (collectively "Taltech") in this Court. Compl., docket no. 1. On April 30, 2004, Taltech Limited filed a complaint alleging patent infringement against Esquel Apparel Inc. and Esquel Enterprises Ltd. (collectively "Esquel") in the Eastern District of Texas, Case No. 2-04CV-179. On July 27, 2005, the Eastern District of Texas transferred its case to the Western District of Washington, Case No. C05-1318TSZ. On October 18, 2005, pursuant to a stipulation of the parties, the Court consolidated the two cases into the present case. Minute Order, docket no. 86. On January 9, 2005, the Court entered an Order Regarding Case Style and Effect of Judgment, which ordered that the case be referred to as Taltech Limited, Plaintiff, v. Esquel Enterprises Ltd., Defendant, and further ordered that specified unnamed parties would be bound by orders and judgments in the case. Order, docket no. 148.

Taltech alleges infringement of its patents for a "wash-n-wear" dress shirt product and methods of producing "pucker free" seams in dress shirts, including 100% cotton shirts. *See* Taltech's Compl., docket no. 22, para. 1 (Case No. C05-1318TSZ). The United States patents at issue here (collectively "the patents-in-suit") are: (1) U.S. Patent No. 5,568,779 (the " '779 Patent"), which is entitled "Pucker Free Garment Seam and Method of Manufacture" and which issued October 29, 1996, and (2) U.S. Patent No. 5,590,615 (the " '615 Patent"), which is entitled "Pucker Free Garment Seam and Method of Manufacture" and which issued January 7, 1997. Joint Claim Chart, docket no. 85, Exs. B and C.

The parties now ask this Court to construe thirteen claim terms contained in both the '779 and the '615 Patents. FN1

FN1. The parties originally disputed fifteen claim terms; however, Esquel has agreed to adopt Taltech's proposed construction of two terms. Accordingly, the Court construes "density of ... grams per square meter" to mean "density of material as defined by the weight of material per unit of surface area" and construes the term "olefinic" to mean "a generic fiber category in which the fiber forming substance is any long-chain synthetic polymer composed of at least 85 percent by weight of ethylene, propylene, or other olefin units."

B. *Legal Standard for Claim Construction*

[1] [2] Claim construction is "a matter of law exclusively for the court," even if the case is designated to go to a jury trial. Markman, 52 F.3d at 970-71. "While a judge is well-equipped to interpret the legal aspects of the [patent] document, he or she must also interpret the technical aspects of the [patent] document, and indeed its overall meaning, from the vantage point of one skilled in the art." Pitney Bowes, Inc. v. Hewlett-

Packard Co., 182 F.3d 1298, 1309 (Fed.Cir.1999).

[3] To interpret the claims of a patent, a court first looks to "the intrinsic evidence of record: the claim, the specification, and, if in evidence, the prosecution history." Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings, 370 F.3d 1354, 1373 (Fed.Cir.2004). The intrinsic evidence is "the most significant source of the legally operative meaning of disputed claim language." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). A court may also consider extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed.Cir.2005) (internal quotations omitted). Extrinsic evidence is most useful to help a court understand the underlying technology and the way in which one skilled in the art might use the claim terms. *See* Phillips, 415 F.3d at 1318-19; Pitney Bowes, 182 F.3d at 1309. Extrinsic evidence, however, is less reliable than intrinsic evidence in determining how to interpret claim terms. Phillips, 415 F.3d at 1318-19. Courts may rely on extrinsic evidence to construe claim terms only if "the patent documents, taken as a whole, are insufficient to enable the court to construe disputed claim terms." Pitney Bowes, 182 F.3d at 1308-09; *see also* Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1332 (Fed.Cir.2001) ("Relying on extrinsic evidence to construe a claim is 'proper only when the claim language remains genuinely ambiguous after consideration of the intrinsic evidence.' ")

[4] Primarily, then, a court focuses on intrinsic evidence to construct the claims. Within the intrinsic evidence, a court first looks to the words of the claims themselves to define the scope of the patented invention. Vitronics, 90 F.3d at 1582. "It 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." Phillips, 415 F.3d at 1312 (internal quotations omitted). The words of a claim "are generally given their ordinary and customary meaning." *Id*. (quoting Vitronics, 90 F.3d at 1582). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id*. at 1313. "[T]he 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.; see also* ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1088 (Fed.Cir.2003) (considering the context of surrounding words of the claim); Vitronics, 90 F.3d at 1582 (considering other claims of the patent in question). "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay persons, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." Phillips, 415 F.3d at 1314. "In such circumstances, general purpose dictionaries may be helpful." *Id*.

[5] [6] Claims are also read in light of the patent specification, which includes not only the claims but also the abstract, background of invention, summary of invention, and detailed description sections of the patent. *See* Signtech USA, Ltd. v. Vutek, Inc., 174 F.3d 1352, 1355 (Fed.Cir.1999). At the same time, a court must avoid importing limitations from the specification into the claims. Phillips, 415 F.3d at 1323. The Federal Circuit has "cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification." Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1328 (Fed.Cir.2002); *see also* Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1117 (Fed.Cir.2004) (stating that "particular embodiments appearing in the written description will not be used to limit claim language that has broader effect"); Home Diagnostics, Inc. v. LifeScan, Inc., 381 F.3d 1352, 1357 (Fed.Cir.2004) ("A patentee may claim an invention broadly and expect enforcement of the full scope of that language absent a clear disavowal or contrary definition in the specification.").

[7] In determining proper claim construction, a court should also consider a patent's prosecution history, if it is in evidence. Phillips, 415 F.3d at 1317. The prosecution history "consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent." *Id*. The prosecution history can demonstrate "how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id*. Although the prosecution history may provide an "interpretive context" for the claims, "courts may not read limitations into the claims." Rambus Inc. v. Infineon Tech. AG, 318 F.3d 1081, 1088 (Fed.Cir.2003).

[8] A court must interpret the claims consistently across all patents that derive from the same parent application and share many common terms. *See* NTP, Inc. v. Research In Motion, Ltd., 418 F.3d 1282, 1293 (Fed.Cir.2005). This is relevant here because the patents-in-suit are based on a single patent application, with the '615 Patent issuing from a continuation of the '779 Patent. As a result, the Court's constructions outlined below apply consistently across both the '779 Patent and the '615 Patent.

C. *Summary of Disputed Claim Terms*

The parties dispute thirteen terms contained in the claims of the '779 Patent and the '615 Patent. Four of the asserted claims are independent claims (i.e., Claims 1 and 20 of the '779 Patent, and Claims 1 and 19 of the '615 Patent), and the remaining claims are dependent claims. Some of the asserted claims are method claims (i.e., Claims 1, 3-7, 10, 12, 17-19 of the '779 Patent, and Claims 1, 2, 4, 10-14, 17-18 of the '615 Patent) and others are product claims (i.e., Claims 20, 22-26 of the '779 Patent, and Claims 19, 20, 26-29 of the '615 Patent).

D. *Construction of Claim Terms in the '779 and* '615 Patents

1. "*Upper Surface" and "Lower Surface*"

[9] Both the method and product claims of the patents-in-suit describe the first and second garment components and the bonding element as each having an "upper surface" and a "lower surface." For example, in Claim 1 of the '779 Patent, a method claim, step (d) of the seam manufacturing process requires "folding the first garment component over the bonding element such that the upper surface of the first garment component is folded over and abuts an upper surface of the bonding element," and step (e) requires "folding a portion of the second garment component such that a lower surface of the second garment component abuts the lower surface of the bonding element." '779 Patent at 6:40-47 (emphasis added). In Claim 20 of the '779 Patent, a product claim, the seam is defined as comprising "a bonding element ... having an upper and lower surface," "a first garment component having an upper and lower surface," and "a second garment component having an upper and lower surface." '779 Patent at 8:7-19 (emphasis added). The '615 Patent similarly uses the terms in Claims 1 and 19, method and product claims, respectively. *See, e.g.,* '615 Patent at 6:48-51, 8:4-16.

Taltech asks the Court to construe "upper surface" and "lower surface" to have different meanings depending on whether the terms appear in the method or the product claims. Regarding the method claims, Taltech construes the terms as follows:

Upper surface and lower surface are designated at the time the first set stitch is applied to fix the garment components and bonding element together, and the upper and lower surfaces of a component/element are

opposing surfaces through a thickness of the component/element, providing that the upper surface and lower surface designations of the garment components remain consistent around folds required in the claim.

Regarding the product claims, Taltech construes the terms as follows:

Upper and lower surfaces of a component/element *in the final seam* are opposing surfaces through a thickness of a component/element, providing that the upper surface and lower surface designations of the garment components remain consistent around folds required in the claim.

The words in italics show how the two definitions differ from each other. Taltech relies on the claims, on the specifications, on the opinion of Taltech's expert, Mr. Jack Nienke, and on a technical treatise.

Esquel asks the Court to construe the terms the same for method and product claims:

The terms "upper surface" and "lower surface," as applied to each of the first and second garment components and the bonding element, mean the entire surface of each that is oriented up or down, respectively, as discerned at the beginning of the seam manufacturing process when the components are flat, such that there is only a single upper surface and a single lower surface for each garment component and the bonding element and the designation of a surface as upper and lower does not change regardless of any subsequent folding or other reorientation of a garment component or the bonding element.

Esquel relies on the specifications and on the ordinary meanings of the terms.

The Court must decide four separate issues: first, whether the Court should construe the terms differently depending on whether the terms appear in method or product claims; second, when the terms must be defined; third, whether the terms require a particular orientation at the time of designation; and fourth, how to account for the manufacturing steps in the method claims and the structural folds in the product claims.

[10] First, the Court must determine whether it may construe the terms differently depending on whether the terms appear in method or product claims. Based on the well-established patent law principle that "claim terms are normally used consistently throughout the patent," Phillips, 415 F.3d at 1314, Esquel argues that Taltech has improperly submitted two different proposed constructions to the Court, one for its method claims and one for its product claims. Although none of the cases relied upon by Esquel squarely address the consistency issue across method and product claims, the cases repeatedly recite the "rule" requiring the same construction of a claim term that appears in more than one claim in a patent. *See* Nazomi Commc'ns, Inc. v. Arm Holdings, PLC, 403 F.3d 1364, 1370 (Fed.Cir.2005); Dayco Prods., Inc. v. Total Containment, Inc., 329 F.3d 1358, 1371 (Fed.Cir.2003); CVI/Beta Ventures, Inc. v. Tura LP, 112 F.3d 1146, 1159 (Fed.Cir.1997). Taltech has failed to bring any case to the Court's attention that provides an exception to the rule for claim construction across method and product claims.

[11] [12] Instead, Taltech argues that different constructions are necessary because of another well-established patent rule, which states that product claims are not limited by a particular manufacturing process. *See* AFG Indus., Inc. v. Cardinal IG Co., 375 F.3d 1367, 1372-73 (Fed.Cir.2004) (declining to "impermissibly import a process limitation into a pure product claim"); Vanguard Prods. Corp. v. Parker Hannifin Corp., 234 F.3d 1370, 1372 (Fed.Cir.2000) ("A novel product that meets the criteria of patentability is not limited to the process by which it was made."). The Court recognizes and honors this rule, but disagrees with Taltech's application of the rule to the present case. If the Court adopts the

construction that Taltech has proposed for its method claims for all claims, there would not be any impermissible importation of a process limitation into Taltech's product claims. Taltech's proposed construction for its method claims merely designates the "upper" and "lower" surfaces at the time the first set stitch is applied to fix the garment components and the bonding element together. This fixing of garment components and the bonding element together by a first set stitch is already required by the language of Taltech's product claims. In other words, Claim 20 of the '779 Patent and Claim 19 of the '615 Patent define the invention as comprising, in part, a first set stitch that fixes the garment components and the bonding element together. '779 Patent at 8:25-30; '615 Patent at 8:17-22. Thus, Taltech's proposed construction for its method claims does not import any limitation into the product claims that does not already exist. The Court construes the terms "upper surface" and "lower surface" the same across all method and product claims.

Second, the Court must determine the point in the manufacturing process when these labels are attached. Regarding its method claims, Taltech argues that the designations should be made when the first stitch is applied. For its product claims, Taltech argues that the designations refer to the final seam. Esquel argues that the designations should be made "at the beginning of the seam manufacturing process when the components are flat." Esquel's proposed construction is vague and improperly limits the claims to require the garment components to be flat. The Court finds Taltech's proposed construction for its method claims more specific and more accurate. The first set stitch is what fixes the positions of the garment components and the bonding element with respect to each other. *See* Claim 1(c) of the '779 Patent at 6:37-39; Claim 1(d) of the '615 Patent 6 :44-47.

This construction regarding the timing of the designation of "upper surface" and "lower surface" is consistent with the specifications. Figures 3a and 4a show that the orientation of upper and lower surfaces of the garment components and the bonding element are meaningful only when they are brought together to form a seam, which is at the point in the seam manufacturing process when the first set stitch is applied. This construction is also consistent with the extrinsic evidence. Taltech's expert, Mr. Nienke, asserts that one of ordinary skill in the art would understand that the appropriate time of designating the upper and lower surfaces is at the time of applying the first set stitch because it is at this time that the garment components are actually fixed together to build the seam. Nienke Decl., docket no. 96, para. 16. The technical treatise submitted by Taltech illustrates that stitches provide meaning for the relative positions of flat or folded fabrics in seams. *See* Harold Carr & Barbara Latham, *The Technology of Clothing Manufacture* 46 (2d ed. Blackwell Sciences 1994) (docket no. 94, Ex. G at 46).

Third, the Court must determine whether the terms require a particular orientation at the time of designation. Taltech argues that the terms merely denote relative surfaces and thus no particular orientation is required. Esquel argues that the "upper surface" faces up and that the "lower surface" faces down at the time of designation. Taltech argues that "[c]ase precedent could not be more clear" that "upper and lower surfaces are not limited to those that point upward and downward, respectively." Taltech's Responsive Brief, docket no. 108, at 6 (citing Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354 (Fed.Cir.2004)). Taltech misreads *Lighting World,* which states that "[n]othing in the patent suggests that the 'upper surface' of the support member *ceases to be* the 'upper surface' if the fixture is turned upside down or placed in some other orientation." 382 F.3d at 1365 (emphasis added). *Lighting World* implies that an "upper surface" of an object faces up *at the time of designation* and then retains its "upper" designation even if it later faces some other orientation.

The widely accepted and ordinary meaning of "upper" is to face up and "lower" is to face down. Taltech

does not argue that a person of ordinary skill in the art would otherwise interpret the terms. These terms must be construed to carry their ordinary meaning. *See* Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1562 (Fed.Cir.1991) ("All the limitations of a claim must be considered meaningful ..."). The specifications also show a particular orientation at the time of designation. Figures 3a and 4a show the "upper surface" of the garment components and bonding element facing up and the "lower surfaces" facing down at the time the first set stitch 38 is applied, so long as the labeling in Figure 4a takes place on the unfolded portion of the second garment component. FN2 *See* '779 Patent at 4:4-14, 5:31-42; '615 Patent at 4:5-15, 5:32-43; Figs. 3a and 4a. For these reasons, the Court concludes that a particular orientation is required at the time of designation. *Lighting World* does not conflict with this conclusion.

FN2. The Court declines to adopt Esquel's proposed convention for labeling the surfaces from the bottom of the seam construction and working upwards, *see* Esquel's Supplemental Brief, docket no. 140, at 13-15, because it improperly imports a limitation from a preferred embodiment into the claims.

Fourth, the Court must account for the manufacturing steps in the method claims and the structural folds in the product claims. Taltech's proposed construction uses language that refers to the folding of the garment components, whereas Esquel's proposed construction refers to "any subsequent folding or other reorientation of a garment component or the bonding element." Because the claims do not include any folding of the bonding element, Esquel's inclusion of the bonding element is erroneous. *See* Claim 1(d) and 1(e) and Claim 20 of the '779 Patent at 6:40-46, 8:10-24; Claim 1(e) and 19 of the '615 Patent at 6:48-51, 8:23-26. Furthermore, Esquel's reference to "any subsequent folding or other reorientation" is vague.

Accordingly, the Court adopts Taltech's proposed construction, with modification, and construes the terms "upper surface" and "lower surface," for both method and product claims, as follows:

"Upper surface" and "lower surface" are designated at the time the first set stitch is applied, and the upper and lower surfaces of a component/element are opposing surfaces through a thickness of the component/element, providing that the "upper surface" faces upward and the "lower surface" faces downward at the time of designation along the unfolded portions of the garment components, and providing that the upper surface and lower surface designations of the garment components remain consistent around folds required in the claim.

2. "*Set Stitch*"

[13] The term "set stitch" is found in both the method and product claims of the patents-in-suit. For example, in Claim 1 of the '779 Patent, a method claim, step (c) of the seam manufacturing process requires "sewing the first and second garment components and the bonding element together by a first set stitch running along the seam." '779 Patent at 6:37-39 (emphasis added). In Claim 20 of the '779 Patent, a product claim, the seam is defined as comprising "a first set stitch running along a first side of the seam and traversing through the bonding element ... the first garment component ... and ... the second garment component...." '779 Patent at 8:25-30 (emphasis added). The '615 Patent similarly uses the term in Claims 1 and 19, method and product claims, respectively. '615 Patent at 6:44-47, 8:17-22.

Taltech asks the Court to construe "set stitch" to mean "a stitch that 'sets' or firmly joins at least the bonding element and two layers of garment material to define their relationship in the garment seam but does not pass through the outer layer of garment material in the finished seam." Taltech relies on the claims, on the

specifications, on the prosecution history of the patents-in-suit, and on the opinion of Taltech's expert, Mr. Nienke. Esquel asks the Court to construe "set stitch" to mean "a stitch used to hold two or more components together and is not visible in the final product." Esquel relies on the specifications, on the prosecution history of the '615 Patent, on a dictionary definition of "set," and on the opinion of Esquel's expert, Mr. Larry Haddock.

The parties agree that the "set stitch" "sets or joins." The parties disagree on whether the bonding element needs to be included in what is set or joined. Taltech also refers to "two layers of garment material," whereas Esquel refers to "two or more components" as being set by the stitch. Lastly, Taltech and Esquel use different language to convey that a set stitch does not pass through the outer layer of garment material and thus is not visible in the final product.

[14] The first issue is whether the bonding element needs to be included in what is set or joined by a "set stitch." Every term found in a claim is presumed to have meaning and purpose. *See* RF Delaware, Inc. v. Pac. Keystone Techs., Inc., 326 F.3d 1255, 1264 (Fed.Cir.2003). Taltech argues that the term "set" distinguishes a stitch that joins at least a bonding element and two layers of garment material from a stitch that merely joins two layers of garment material. Claims 1 and 20 of the '779 Patent and Claims 1 and 19 of the '615 Patent describe the "first set stitch" as traversing through the bonding element and the first and second garment components. '779 Patent at 6:37-39, 8:25-30; '615 Patent at 6:44-47, 8:17-22. In contrast, the "second stitch," in which the word "set" is notably missing, is described in Claims 1 and 19 of the '615 Patent as traversing through the first and second garment components and not the bonding element. '615 Patent at 6:56-60, 8:23-26; *see* ACTV, 346 F.3d at 1088 (considering the context of surrounding words of the claim). This distinction between "first set stitch" and "second stitch" lends support to Taltech's proposed construction. However, in Claims 1 and 20 of the '779 Patent, the "second stitch" traverses through *the bonding element* in addition to the first and second garment components. '779 Patent at 6:47-49, 8:31-37. As a result, the claims do not consistently use "set" to distinguish a stitch that joins a bonding element to other components from one that does not.

Taltech argues that the specifications show that a set stitch joins a bonding element to other components. '779 Patent at 4:4-9, 5:31-38; '615 Patent at 4:5-10, 5:32-39. While this may be true, the Court refuses to import a limitation from the specifications into the claims. *See* Teleflex, 299 F.3d at 1328.

The expert testimony relied upon by Taltech does not require a set stitch to join a bonding element to other components. Although Mr. Nienke recites Taltech's proposed construction (Nienke Decl., docket no. 96, para. 22), he discusses how the term is used in the industry to describe a stitch where a seam is being constructed just using fabrics (i.e., not including a bonding element). *See* Nienke Decl. para. 23.

Taltech argues that the prosecution history of the '779 Patent supports its proposed construction. *See* '779 Prosecution History, March 11, 1996, Amendment Filed Under 37 C.F.R. s. 115, docket no. 85, Ex. D (part 2) at 13. Except for showing that the term "set" was added to the "first stitch" claim language, this evidence does not explain why the word "set" was added, other than "to clarify" and "to improve readability." *Id.* These proclaimed reasons are not particularly useful in assisting the Court's construction of "set stitch." What is clear is that nothing in the prosecution history of the '779 Patent indicates an intent to require the presence of a bonding element in the materials fixed by a "set stitch."

For all these reasons, the Court does not require that a bonding element be included in what is set or joined by a "set stitch."

Next the Court must address Taltech's reference to "two layers of garment material" versus Esquel's reference to "two or more components." At the *Markman* hearing, Taltech emphasized that stitch 48 in Figure 4a is a set stitch and that it joins a bonding element to two layers of garment material (i.e., a folded over portion of a single garment component, the second garment component) and does not join a bonding element to two garment components. '779 Patent at 4:7-9 (describing first set stitch 38 in Figure 3a as "set sleeve stitch"), 5:34-42 (describing stitch 48 in Figure 4a as "needle set sleeve"). Although this is an accurate description of stitch 48 in Figure 4a, the Court hesitates to introduce a new term, "layers of garment material," into the definition of set stitch, when "garment component" is one of the disputed terms that the Court has been asked to construe. On a related note, at the *Markman* hearing, Esquel pointed out that although it advocates a construction in which a bonding element is not *required* to be joined by a set stitch, it does not urge the adoption of a construction that precludes the joining of a bonding element to a garment component by a set stitch. The Court modifies the first part of Taltech's proposed construction to read: "A stitch that sets or joins *at least a garment component and a bonding element together,* or *at least two garment components together,* to define their relationship in the garment seam...."

Regarding the second part of the parties' proposed constructions of "set stitch," the prosecution history of the '615 Patent supports Taltech's construction that a "set stitch" "does not pass through the outer layer of garment material in the finished seam." '615 Prosecution History, March 11, 1996, Preliminary Amendment Filed Under 37 C.F.R. s. 115, docket no. 85, Ex. E at 10. The Preliminary Amendment discusses how the "Benstock stitches" are deficient because they "fail[ ] to show a 'first set stitch' ... and a 'second stitch' as claimed" in that they "protrude through the top fabric ply." *Id*. Esquel's proposed construction states that a set stitch "is not visible in the final product." Esquel's proposed construction does not appear to conflict with Taltech's proposed construction, but merely states it a different way. Taltech's proposed construction is more aligned with the wording in the prosecution history of the '615 Patent and will be adopted; however, for the same reason outlined above, the Court will use the construed term "garment component" in place of "layer of garment material."

Accordingly, the Court adopts Taltech's proposed construction, with modification, and construes the term "set stitch" to mean "a stitch that 'sets' or joins at least a garment component and a bonding element together, or at least two garment components together, to define their relationship in the garment seam, but does not pass through the outer garment component in the finished seam."

3. "*Abuts*"

[15] The term "abuts" is found in both the method and product claims of the patents-in-suit. For example, in Claim 1 of the '779 Patent, a method claim, step (b) of the seam manufacturing process requires "placing a bonding element ... such that a lower surface of the bonding element abuts an upper surface of the first garment component." '779 Patent at 6:33-36 (emphasis added). Similarly, steps (d) and (e) require that an upper or lower surface of a garment component "abuts" an upper or lower surface of the bonding element. '779 Patent at 6:40-46. In Claim 20 of the '779 Patent, a product claim, the seam is defined as comprising "a second garment component ... such that ... a portion of said upper surface of the second garment component abuts a lower surface of the first garment component ..." and "a first set stitch ... traversing through the bonding element ... the first garment component ... and ... the second garment component which abuts said lower surface of the first garment component." '779 Patent at 8:18-30 (emphasis added). The '615 Patent similarly uses the term in Claims 1 and 19, method and product claims, respectively. '615 Patent at 6:48-51, 8:12-22.

Taltech asks the Court to construe "abuts" to mean "to touch, border on, or end at a surface, including being directly bonded to that surface." Taltech relies on the patent specifications, on a dictionary definition of "abut," and on patent publications in the garment industry such as U.S. Russell Patent No. 4,333,980 (Taltech's *Markman* Ex. 10). Esquel asks the Court to construe "abuts" to mean "touching (i.e., having direct contact) at a border." Esquel relies on the patent specifications, on the prosecution history of Taltech's related U.S. Patent No. 6,079,343 (the " '343 Patent"), on the opinion of Esquel's expert, Mr. Haddock, and on the deposition testimony of Taltech's expert, Mr. Nienke.

The point of contention concerning the construction of "abuts" is whether touching, i.e., having direct contact, is required. Esquel argues that touching is required, whereas Taltech argues that "abuts" does not necessarily require direct contact. Taltech argues that "the two surfaces of garment components are deemed abutting where adhesive holds the two abutting surfaces together." In other words, the surfaces of garment components that are separated by a bonding element would "abut" under Taltech's proposed construction.

The Court finds Esquel's proposed construction more persuasive. Although neither party relied on the claims, the Court first looks to them to interpret the disputed term. As outlined above, Claim 20 of the '779 Patent and Claim 19 of the '615 Patent use the term "abuts" to refer to contact between the surfaces of first and second garment components, whereas Claim 1 of the '779 Patent and Claim 1 of the '615 Patent use the term "abuts" to refer to contact between a surface of a garment component and *a surface of a bonding element*. Given the latter use of "abuts," Taltech's proposed construction makes no sense. The surfaces of garment components cannot "abut" if there is a bonding element in between them. If that were the case, Claim 1 of both patents would not have used the term "abuts" to describe the contact between the surfaces of a garment component *and a bonding element*. Taltech's proposed construction ignores the existence of a bonding element when using the term "abuts;" however, the claims themselves do not ignore the existence of a bonding element when using the term "abuts."

Furthermore, Taltech's reliance on the following excerpt from the specifications is misplaced:

Preferably, the bonding element 32 comprises an adhesive web which flows during ironing onto the abutting surfaces of the garment components to create a very strong bond between the garment components along the garment seam 12.

'779 Patent at 6:1-5; '615 Patent at 6:3-7 (emphasis added). Taltech argues that this excerpt shows that "the 'abutting surfaces of the garment components' need not necessarily touch-as the bonding element is between the two abutting surfaces of the garment components." Taltech's argument is not persuasive. Taltech has taken the phrase "abutting surfaces of the garment components" out of context. The surfaces of the first and second garment components are not abutting each other. The subject of the sentence is "the bonding element 32" and the bonding element is the object that is abutting the surfaces of the garment components. This interpretation is supported by the claims, which describe the bonding element as abutting the first and second garment components prior to fusing the seam together. *See* '779 Patent at 6:33-36, 6:40-46, 8:10-21; '615 Patent at 6:42-43, 6:48-51, 8:4-11. The only time that the claims clearly describe one garment component abutting another is when there is no bonding element between them. *See* '779 Patent at 8:21-24 ("... a portion of said upper surface of the second garment component abuts a lower surface of the first garment component along the seam"); '615 Patent at 8:13-16 ("... a portion of the upper surface of the second garment component abuts at least a portion of the lower surface of the first garment component"); Fig. 3b. Taltech's interpretation of the specifications would be more persuasive if the sentence following the

quoted excerpt stated as follows: "This bond prevents the first garment component 20 from separating from the [abutting] garment component 22 during the subsequent laundering of the garment." '779 Patent at 6:5-8. However, the term "abutting" does not appear in that sentence.

Other parts of the specifications also support Esquel's proposed construction that "abuts" does not signify a relationship between the surfaces of two garment components with a bonding element in between them. *See* '779 Patent at 4:8-17, 4:59-63; '615 Patent at 4:10-18, 4:60-64; Fig. 3b. FN3 These specification excerpts do not ignore the existence of the bonding element when using the term "abuts." Under Taltech's proposed construction, the specifications would state that Figure 3b depicts the upper surface 24 of the first garment component 20 abutting the lower surface 30 of the second garment component 22. The specifications include no such statement.

FN3. The patent appears to contain an error in that it should say "36" rather than "26" to refer to the lower surface of the bonding element in the '779 Patent at 4:62 and in the '615 Patent at 4:63. *See* '779 Patent at 3:52-53 and '615 Patent at 3:53-54 ("The bonding element 32 has an upper surface 34 and a lower surface 36.").

The claims further support Esquel's proposed construction because the claims have used the term "abuts" interchangeably with the term "contacts." Claim 1(b) of the '779 Patent speaks of "placing a bonding element ... along the seam such that a lower surface of the bonding element abuts an upper surface of the first garment component." '779 Patent at 6:33-36 (emphasis added). The analogous Claim 1(c) of the '615 Patent speaks of "placing the bonding element along the seam ... such that the lower surface of the bonding element contacts at the seam the upper surface of the first garment component. " '615 Patent at 6:39-43 (emphasis added). This is direct evidence from the claims themselves that the term "abuts" requires contact.

The extrinsic evidence supports Esquel's proposed construction requiring contact or touching. First, the prosecution history of the '343 Patent supports Esquel's proposed construction that the term "abuts" requires direct contact. The term "abuts" was used in some of the pending claims to describe a relationship of "direct contact" between the thermoplastic adhesive (i.e., the bonding element) and the garment components. Docket no. 85, Ex. F (part 2) at 32 ("a single strip of thermoplastic adhesive is in *direct contact* with both the first and second garment component [sic] forming the seam") (emphasis added). Second, the dictionary definition provided by Taltech-i.e., "abut ... to touch along a border or with a projecting part ... to terminate at a point of contact ... to lean for support ... to border on"-supports *Esquel's* position that the term requires touching and contact. *See Merriam Webster's Collegiate Dictionary* 5 (10th ed.1993) (docket no. 94, Ex. A at 2). Nothing in this dictionary definition supports Taltech's proposed construction to expand the definition of "abuts" to include "being directly bonded to that surface." Third, Taltech's expert, Mr. Nienke, testified in a deposition on September 16, 2005, that had he not spoken with the attorneys in this case he would have defined "abut" simply to mean "touch." Nienke Dep. at 9:3-10 (Esquel's *Markman* Ex. 1).

At the *Markman* hearing, Taltech argued that Esquel's proposed construction language of "at a border" is ambiguous. The Court agrees. Taltech suggested replacing the "at a border" language with "along a surface." Rather than adopting Taltech's suggestion, which may improperly limit the claims, the Court simply omits Esquel's proposed "at a border" language from the Court's construction.

Accordingly, the Court adopts Esquel's proposed construction, with modification, and construes the term "abuts" to mean "touching (i.e., having direct contact)."

4. "*Garment Component*"

[16] The term "garment component" is found in both the method and product claims of the patents-in-suit. For example, in Claim 1 of the '779 Patent, a method claim, step (a) of the seam manufacturing process requires "placing the first garment component in an adjacent relationship to the second garment component so as to define a seam." '779 Patent at 6:30-32 (emphasis added). In Claim 20 of the '779 Patent, a product claim, the seam is defined as comprising "a first garment component having an upper and lower surface" and "a second garment component having an upper and lower surface. " '779 Patent at 8:10-11, 8:18-19 (emphasis added). The '615 Patent similarly uses the term in Claims 1 and 19, method and product claims, respectively. '615 Patent at 6:31-36, 8:4-5, 8:12-13.

Taltech asks the Court to construe "garment component" to mean "a structural part of a garment, such as a front panel, yoke, rear panel, and sleeve. An interlining is not a garment component." Taltech relies on the specifications and on the opinion of Taltech's expert, Mr. Nienke. Esquel asks the Court to construe "garment component" to mean "any element of an article of clothing," including an interlining, a bonding element or thread. Esquel relies on the patent specifications, on a dictionary definition of "component," and on a technical treatise.

The Court finds Taltech's proposed construction more persuasive. Claim 6 of the '779 Patent and Claim 13 of the '615 Patent state that "... said first garment component comprises a front panel, yoke, and rear panel of a dress shirt and said second garment component comprises a shirt sleeve ... " '779 Patent at 7:10-13; '615 Patent at 7:40-42 (emphasis added). The specifications state that "a pucker free garment seam 12" consists of "a first garment component 20, such as a component consisting of a dress shirt front panel 16, yoke 14, and rear panel; a second garment component 22 such as a dress shirt sleeve 12[sic]; FN4 and a bonding element 32. " '779 Patent at 5:60-65; '615 Patent at 5:62-67 (emphasis added); *see also* Fig. 2; '779 Patent at 3:44-47; '615 Patent at 3:45-48 (defining first garment component as comprising a front panel, shirt yoke and rear panel and the second garment component as comprising a shirt sleeve). The examples of a "garment component" identified in the claims and specifications are those that Taltech includes in its proposed construction of the term. Although this is not an exhaustive list of possible garment components, nothing in the intrinsic evidence supports Esquel's broad construction of the term.

FN4. The patent appears to contain an error in that it should say "13" rather than "12" to refer to the shirt sleeve in the '779 Patent at 5:64 and in the '615 Patent at 5:66. *See* '779 Patent at 3:46-47 and '615 Patent at 3:48 ("the second garment component comprises a shirt sleeve 13.").

First, a bonding element is not a garment component. The specifications, as outlined above, separately list the bonding element as its own thing, and not as an example of a garment component. '779 Patent at 5:58-65; '615 Patent at 5:60-67; *see also* '779 Patent at 6:26-56 (Claim 1 separately refers to garment components and bonding elements as distinct objects); '615 Patent at 6:28-67 (same). Nothing in the intrinsic evidence indicates that the terms should be used interchangeably.

Second, an interlining is not a garment component. The specifications of the patents-in-suit state: "Interlinings are known in the art to provide stiffness to garment components." '779 Patent at 5:1-2; '615 Patent at 5:2-3 (emphasis added). This sentence only makes sense if the Court interprets interlinings and garment components to be distinct categories. Esquel's genus and species analogy, *see* Esquel's Responsive

Brief, docket no. 111, at 12 n. 6, is not persuasive because there is no evidence in the patent for the proposition that interlinings are a subset of the broader category of garment components. Esquel argues that garment components should specifically include "fusible and non-fusible interlinings ... and fusible webs or nets;" however, Esquel's interpretation is unsupported by the intrinsic evidence. Esquel relies on parts of the specification of the '779 Patent that have no bearing on the construction of the term "garment component." *See* Esquel's Opening Brief, docket no. 97, at 21 (citing '779 Patent at 3:51-4:3, 4:66-5:1).

Third, thread is not a garment component. Esquel argues to the contrary and relies on the characterization of "components of garments" in a technical treatise that includes interlinings and thread as examples of "components of garments." *See* Peyton B. Hudson, *Guide to Apparel Manufacturing* 51-63 (Rev.2d ed. MEDIA Apparel, Inc.1989) (docket no. 97, Ex. E). The Court does not rely on extrinsic evidence that is inconsistent with the intrinsic evidence. In this case, the specifications state that "the sewing thread contracts upon being laundered and pulls on opposing garment components at the garment seam which in turn causes the garment components to buckle...." '779 Patent at 1:22-26; '615 Patent at 1:26-29 (emphasis added). Thread acts on the garment components, indicating that it must be a distinct object. The specifications' reference to garment components as coming together at a seam and as buckling are further evidence that a garment component is a fabric panel, not thread.

To interpret the term "garment component," the Court does not rely on the expert testimony provided by Taltech. *See* Nienke Decl., docket no. 96, para. 28. Mr. Nienke's opinion regarding the term "garment component" is merely conclusory. *See* Phillips, 415 F.3d at 1318 ("[C]onclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court."). The intrinsic evidence is sufficient to support Taltech's proposed construction.

Accordingly, the Court adopts Taltech's proposed construction, with modification, and construes the term "garment component" to mean "a structural part of a garment,such as a front panel, yoke, rear panel, and sleeve. A bonding element, an interlining, and thread are not garment components."

5. "*A Bonding Element*"

[17] The term "a bonding element" is found in both the method and product claims of the patents-in-suit. For example, in Claim 1 of the '779 Patent, a method claim, step (b) of the seam manufacturing process requires "placing a bonding element having at least a thermal adhesive component along the seam.... " '779 Patent at 6:33-34 (emphasis added). In Claim 20 of the '779 Patent, a product claim, the seam is defined as comprising "a bonding element having at least a thermal adhesive component and having an upper and lower surface." '779 Patent at 8:8-9 (emphasis added). The '615 Patent similarly uses the term in Claims 1 and 19, method and product claims, respectively. '615 Patent at 6:37-39, 8:2-3.

Taltech asks the Court to construe "a bonding element" to mean "one or more substances or constituents of a whole that bind, fasten, fuse, confine, or hold together." Taltech argues that Federal Circuit case law does not restrict the indefinite article "a" to mean a *single* substance. Esquel asks the Court to construe "a bonding element" to mean "a single component or constituent that facilitates a binding, fastening, fusing, confining or holding together." Esquel relies on the use of "a" and "the" in the claim language, on the specifications, and on the prosecution history of the '615 Patent.

[18] The parties' dispute centers on the meaning of the article "a," specifically whether the article limits the number of bonding elements to only one or whether it covers one or more bonding elements. The Federal

Circuit "has repeatedly emphasized that an indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.' " KCJ Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1356 (Fed.Cir.2000). To overcome this presumption, the intrinsic evidence must demonstrate a "clear intent" to limit the article to a singular interpretation. *Id.* In *KCJ,* the claim language, "a ... continuous ... chamber," did not specify the number of chambers. *Id.* at 1357. In other words, there was no "numerical qualifier" in the claim language. *Id.* Furthermore, the written description did not restrict the invention to only one chamber. *Id.* As a result, the Federal Circuit held that " 'a ... continuous ... chamber' covers one or more continuous chambers." *Id.*

Esquel seeks to limit the scope of "a bonding element" to "a single bonding element" because Figures 3(a)-3(c) and 4(a)-4(c) depict a single bonding element. While an example described in a specification provides context for claim interpretation, it does not constitute a "clear statement of scope" to limit the claims. *See* Teleflex, 299 F.3d at 1327-28. In *Teleflex,* the Federal Circuit rejected the interpretation that a "clip" was limited to having a single pair of legs as depicted in the specification because neither "single" nor "pair of legs" appeared in the claims. *Id.* at 1327. The Federal Circuit "cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification." *Id.* at 1328. Similarly here, the Court does not interpret "a bonding element" to be a single bonding element merely because it is depicted that way in the specifications when the word "single" does not appear in the claims to qualify "a bonding element." The present case stands in stark contrast to the case relied upon by Esquel in which the claims described the switch as a "single" switch. *See* Innovad Inc. v. Microsoft Corp., 260 F.3d 1326, 1333 (Fed.Cir.2001) ("The term 'single' ... precludes the use of multiple switches ...").

In an effort to limit the scope of the term "a bonding element," Esquel relies on the prosecution history of the '615 Patent, which refers to "the bonding element" as "it." '615 Prosecution History, March 11, 1996, Preliminary Amendment Filed Under 37 C.F.R. s. 115, docket no. 85, Ex. E at 7. However, merely referring to "the bonding element" as "it" does not demonstrate a "clear intent" to limit the term to a singular interpretation.

Esquel further argues that the claim language's reference to "the" bonding element after initially defining "a" bonding element shows that "a bonding element" denotes singularity. The Federal Circuit has squarely rejected this argument. *See* Free Motion Fitness, Inc. v. Cybex Int'l, Inc., 423 F.3d 1343, 1350-51 (Fed.Cir.2005) (affording the word "the" the same presumptive meaning of "one or more" when used with the transitional phrase "comprising").

Because nothing in the intrinsic evidence demonstrates a clear intent to overcome the presumption that the articles "a" or "the" mean "one or more," the Court adopts Taltech's proposed construction and construes the term "a bonding element" to mean "one or more substances or constituents of a whole that bind, fasten, fuse, confine, or hold together."

6/7. "Adjacent Relationship" and "Juxtaposed Relationship"

[19] The term "adjacent relationship" is found only in the method claims of the '779 Patent. In Claim 1 of the '779 Patent, step (a) of the seam manufacturing process requires "placing the first garment component in an adjacent relationship to the second garment component so as to define a seam. " '779 Patent at 6:30-32 (emphasis added).

The term "juxtaposed relationship" is found only in the method claims of the '615 Patent. In Claim 1 of the

'615 Patent, step (b) of the seam manufacturing process requires "providing a second garment component in a juxtaposed relationship with respect to the first garment component to be joined at a seam to the first garment component." '615 Patent at 6:33-36 (emphasis added).

Taltech asks the Court to construe "adjacent relationship" to mean "next to" and "juxtaposed relationship" to mean "placed next to." Taltech also interprets these terms not to require touching, an interpretation that Esquel does not contest. Taltech relies on the claims, on the specifications, and on dictionary definitions of "adjacent" and "juxtaposed." Esquel agrees with Taltech's proposed construction so long as "next to" is given its ordinary meaning, i.e., "immediately following." Esquel relies on the specifications and on a dictionary definition of "next to." The parties' dispute centers on whether any intervening material may exist between two garment components that are placed in an "adjacent" or "juxtaposed" relationship. Taltech interprets "adjacent" and "juxtaposed" to allow intervening material, whereas Esquel's interpretation does not allow any intervening material.

In *Free Motion,* "the district court construed 'adjacent' to mean 'that objects may or may not be in contact, but are not adjacent to each other where there is another object between them.' " 423 F.3d at 1348 (quoting Free Motion Fitness, Inc. v. Cybex Int'l, Inc., 311 F.Supp.2d. 1297, 1304 (D.Utah 2003)). On appeal, the Federal Circuit concluded that there were two possible dictionary definitions of "adjacent" to choose from in that case: one definition was "not distant" and the other was "relatively near and having nothing of the same kind intervening." Id. at 1349 (quoting *Webster's Third New Int'l Dictionary of the English Language Unabridged* 26 (2002)). After noting that "any reliance on dictionaries" must "accord[ ] with the intrinsic evidence," the Federal Circuit vacated the district court's construction that adopted the second dictionary definition because that definition was inconsistent with the intrinsic evidence. *See* id. at 1348-49. Nothing in the patent at issue in *Free Motion* suggested a concern with an object intervening in between the "adjacent" pivot point and resistance assembly, particularly since the adjacent objects were not of the "same kind." *Id.* at 1349.

In the present case, because the adjacent/juxtaposed objects (i.e., garment components) are of the "same kind," *Free Motion* counsels that an intervening garment component may be a concern. Nonetheless, the Court is not bound by a dictionary definition discussed in *Free Motion*. Although it is true that Figures 3a and 4a depict the adjacent/juxtaposed relationship as having no intervening garment component between the two "adjacent" or "juxtaposed" garment components, the Court declines to limit the claims by the preferred embodiments. Nothing in the intrinsic evidence demonstrates an intent to preclude the adjacent/juxtaposed relationship where an object intervenes.

Accordingly, the Court adopts Taltech's proposed construction, with modification, and construes the terms "adjacent relationship" and "juxtaposed relationship" to have identical meanings FN5 and to mean "next to but not necessarily touching."

FN5. At the *Markman* hearing, the parties agreed that the Court should construe the terms "adjacent relationship" and "juxtaposed relationship" the same.

8. "*Seam*"

[20] The term "seam" is found in both the method and product claims of the patents-in-suit. For example, in Claim 1 of the '779 Patent, a method claim, step (a) of the seam manufacturing process requires "placing the

first garment component in an adjacent relationship to the second garment component so as to define a seam." '779 Patent at 6:30-32 (emphasis added). In Claim 20 of the '779 Patent, a product claim, the "smooth seam" is defined as comprising "a bonding element," "a first garment component," "a second garment component," "a first set stitch," "a second stitch" and "the bonding element of the seam having been subjected to a sufficient amount of heat...." '779 Patent at 8:7-43 (emphasis added). The '615 Patent similarly uses the term in Claims 1 and 19, method and product claims, respectively. '615 Patent at 6:28-36, 8:1-33.

Taltech asks the Court to construe "seam" to mean "two or more plies of fabric material joined together by sewing along a line." Taltech relies on the opinion of Taltech's expert, Mr. Nienke, and on specialized dictionary definitions of "seam." Esquel asks the Court to construe "seam" to mean "the place where at least two pieces of fabric are joined by stitches, the width of the seam being defined by the distance between two stitches." Esquel relies on the claims, on the specifications, and on the opinion of Esquel's expert, Mr. Haddock. The parties' differences on the construction of "seam" centers on the minimum number of rows of stitches required. Esquel asserts that at least two rows of stitches are required for a seam, whereas Taltech asserts that no particular number of rows of stitches is required.

The Court finds Esquel's proposed construction more persuasive. The claims define a seam as bounded by two stitches that create two "sides" of a seam: "a first set stitch running along a first side of the seam ... a second stitch running along a second side of the seam...." '779 Patent at 8:25, 8:31; '615 Patent at 8:17, 8:23 (emphasis added); *see also* '615 Patent at 6:44, 6:56. The different sides of the seam are bounded by two different stitches. The specifications also define the "seam width" as the distance (labeled 46 in Fig. 3c) between two stitches (labeled 38 and 40 in Fig. 3c) and note the importance of having the bonding element flow over the entire surface of the seam width for maximum prevention of pucker. Fig. 3c; '779 Patent at 4:53-59; '615 Patent at 4:54-60. This definition of "seam width" indicates that more than one row of stitches must define the seam. *See* Phillips, 415 F.3d at 1321 ("[T]he specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication." (internal quotation marks omitted)). The Court does not rely on extrinsic evidence to interpret "seam" because the intrinsic evidence is sufficient to enable the Court to construe the term. *See* Pitney Bowes, 182 F.3d at 1308-09.

Accordingly, the Court adopts Esquel's proposed construction, with modification, and construes the term "seam" to mean "the place where at least two pieces of fabric are joined by at least two rows of stitches."

9. "*First*" *and* "*Second*" *Stitch*

[21] The terms "first" and "second" are used to describe stitches in both the method and product claims of the patents-in-suit. For example, in Claim 1 of the '779 Patent, a method claim, step (c) of the seam manufacturing process requires "sewing the first and second garment components and the bonding element together by a first set stitch running along the seam" and step (f) requires "sewing the first and second garment components and the bonding element together by a second stitch running along said seam." '779 Patent at 6:37-39, 6:47-49 (emphasis added). In Claim 20 of the '779 Patent, a product claim, the seam is defined as comprising "a first set stitch running along a first side of the seam and traversing through the bonding element ... the first garment component ... and ... the second garment component ..." and "a second stitch running along a second side of the seam and traversing through the ... first garment component ... the bonding element ... and the second garment component." '779 Patent at 8:25-30, 8:31-36 (emphasis added). The '615 Patent uses "first" and "second" to describe stitches in Claims 1 and 19, method and product claims, respectively. '615 Patent at 6:44-47, 6:56-60, 8:17-26. In contrast to step (f) in Claim 1 of the '779

Patent, step (f) in Claim 1 of the '615 Patent references both stitches and speaks of "sewing a second stitch running along a side of the seam opposite the first stitch...." '615 Patent at 6:56-57 (emphasis added).

Both parties agree that the "first stitch" is a set stitch and that the "second stitch" is a top stitch. *See, e.g.*, Taltech's Supplemental Brief, docket no. 137, at 15; Esquel's Supplemental Brief, docket no. 140, Ex. A at 2.FN6 The parties' dispute is not over whether these stitches are different types of stitches but whether these stitches must come in a particular order. Taltech asks the Court to construe "first stitch" to mean "one stitch" and "second stitch" to mean "another stitch different from the first stitch." Taltech relies on the claims and on the specifications. Esquel asks the Court to construe "first stitch" to mean "the very first stitch made in the seam manufacturing process" and "second stitch" to mean "the next stitch made in the seam manufacturing process after the 'first set stitch.' " Esquel relies on the claims, on the specifications, on the prosecution history of the '779 Patent, on dictionary definitions of "first" and "second," on Taltech's "tutorial" (Taltech's *Markman* Ex. 7), on the Esquel animation (Esquel's *Markman* Ex. 3), and on admissions made by Taltech's counsel at the *Markman* hearing.

FN6. The patents use "first stitch" and "first set stitch" interchangeably. The prosecution history of the '779 Patent shows that the word "set" was added to Independent Claims 17 and 34, which became Independent Claims 1 and 20, to clarify that the "first stitch" is a "set stitch." '779 Prosecution History, March 11, 1996, Amendment Filed Under 37 C.F.R. s. 115, docket no. 85, Ex. D (part 2) at 13. This change, however, was not consistently applied throughout the patents-in-suit. As a result, sometimes the patents refer to the "first stitch" and other times to the "first set stitch." The Court uses "first stitch" to mean "first set stitch."

While it is true that "[t]he use of the terms 'first' and 'second' is a common patent-law convention to distinguish between repeated instances of an element or limitation," *see* 3M Innovative Props. Co. v. Avery Dennison Corp., 350 F.3d 1365, 1371 (Fed.Cir.2003), the patents-in-suit do *not* use the terms "first" and "second" to distinguish between repeated instances of the same thing. Rather, the patents-in-suit use the terms "first" and "second" to distinguish between different types of stitches. As a result, the *3M* "common patent-law convention" does not apply in the present case.

The Court first looks to the claims to construe "first stitch" and "second stitch." Step (f) in Claim 1 of the '615 Patent speaks of "sewing a second stitch running along a side of the seam *opposite the first stitch* such that...." '615 Patent at 6:56-57 (emphasis added). This claim language shows that the first stitch must be sewn priorto the sewing of the second stitch. Taltech admits this by way of its proposed construction of "a method ... comprising the steps." *See* Taltech's Supplemental Brief, docket no. 137, at 8 (arguing that the language and logic of Claim 1 of the '615 Patent requires step (f), the sewing of a second stitch, to occur after step (e), the folding of the first garment component, which in turn must occur after step (d), the sewing of a first set stitch).

In multiple instances, Taltech has admitted that the first set stitch is sewn prior to the second top stitch. Taltech's "tutorial" described how the armhole seam is created in "three steps":

First, the sleeve is attached, or 'set' to the shirt body with the set stitches [first and additional stitches]. The body panel is folded over the set stitches and a top stitch [second stitch] is applied. Next, the sides of the sleeve and shirt body are sewn together with the side seam.

Taltech's Tutorial (Taltech's *Markman* Ex. 7 at 11). During the *Markman* hearing, Taltech described how the

second top stitch comes after the first set stitch in the preferred embodiments:

This set stitch 38 [first stitch] goes through the first and second garment components and fixes them together and has to do that before this is folded over and the top stitch 40 [second stitch] is applied. You just asked me about the top stitch 40 [second stitch], does it have to take place after the set stitch 38 [first stitch], and I said yes.

Markman Hearing Tr., docket no. 130, at 84.

The specifications indeed show that the first set stitch 38 is sewn prior to the second top stitch 40 in the preferred embodiments. *See* Figs. 3a-3b, 4a-4b. Although the preferred embodiments alone are insufficient to impose a limitation on the claims, their depiction of the first set stitch preceding the second top stitch is consistent with the language of step (f) in Claim 1 of the '615 Patent.

The Court must construe "first stitch" and "second stitch" in light of all of the claims, including Claims 17 and 18 of the '779 Patent and Claim 18 of the '615 Patent, which describe sewing an "additional stitch" "prior to the step of sewing the ... second stitch...." '779 Patent at 7:59-8:2; '615 Patent at 7:61-67; *see* Vitronics, 90 F.3d at 1582 (considering other claims of the patent in question). Esquel's proposed construction-which requires "first stitch" to mean "the very first stitch made in the seam manufacturing process" and "second stitch" to mean "the next stitch made in the seam manufacturing process after the 'first set stitch' "-precludes the sewing of an additional stitch prior to the second stitch, which cannot be correct. Esquel argues that its proposed construction is consistent with the "additional stitch" claim language because the first set stitch and the additional stitch are sewn simultaneously. The Court rejects this argument because the first and additional stitches are not necessarily sewn simultaneously. Claim 18 of the '779 Patent requires the first and additional stitches to be sewn simultaneously, implying, under principles of claim differentiation, that this is not the case in Claim 17. '779 Patent at 7:57-8:2. Thus, the additional stitch may be sewn prior to, at the same time as, or after the first stitch. To the extent the additional stitch occurs after the first stitch, Esquel's proposed construction does not work because this construction would require the second stitch to be the "next" stitch after the first stitch.

The Court must construe the terms "first stitch" and "second stitch" consistently across all method and product claims. Taltech argues that any temporal limitation is meaningless with respect to its product claims because a product claim may not be limited by its disclosed method of manufacture. *See* Cordis Corp. v. Medtronic AVE, Inc., 339 F.3d 1352, 1357 (Fed.Cir.2003) (declining to superimpose a process limitation on the product claims at issue). The imposition of a process limitation on Taltech's product claims is unavoidable here because the intrinsic evidence compels the imposition of a temporal limitation.

Taltech's proposed construction is too broad, and Esquel's proposed construction is too narrow. Accordingly, the Court adopts a construction that combines concepts from both of the parties' proposed constructions, and construes the term "first stitch" to mean "one stitch" and the term "second stitch" to mean "another stitch after the first stitch, but not necessarily the next stitch after the first stitch."

10. "***A method ... comprising the steps***"

[22] The term "a method ... comprising the steps" is found only in the method claims of the patents-in-suit. This term constitutes the preamble and transitional phrase of the method claims. Claim 1 of the '779 Patent claims: "A method of manufacturing a smooth garment seam between first and second garment components

comprising the steps" (a) through (g). '779 Patent at 6:26-28 (emphasis added). Claim 1 of the '615 Patent claims: "A method of manufacturing a pucker free garment seam between first and second garment components comprising the steps" (a) through (g). '615 Patent at 6:28-30 (emphasis added).

Taltech originally asked the Court to construe "a method ... comprising the steps" to mean that "elements (a)-(g) of these method claims may be performed in any order consistent with the language and logic of the respective method claim and consistent with the Taltech '779 and '615 patent specifications." In its supplemental brief, Taltech altered its proposed construction as follows:

Elements of the method claims may be performed in any order consistent with the language and logic of the respective method claim and consistent with the patent specification, provided that claim 1 of the '779 Patent recites a method requiring that steps (c), (d) and (f) be performed after step (b), and that step (g) be performed after step (e). Claim 1 of the '615 Patent recites a method requiring that step (d) be performed after step (c), step (e) be performed after step (d), step (f) be performed after step (e), and step (g) be performed after step (e).FN7

FN7. The Court distributed a document entitled "The Court's Preliminary Construction of Claims Prior to *Markman* Hearing" to the parties prior to the *Markman* hearing to focus the parties' arguments. The Court's preliminary construction of claims was not binding on the parties and was not meant to be reviewed on appeal. The Court advised that any opinions contained therein were tentative and subject to change. Taltech altered its proposed construction of "a method ... comprising the steps" in response to the Court's preliminary construction of the term. *See* Taltech's Supplemental Brief, docket no. 137, at 6-7.

Taltech relies on the claims, on the specifications, on the opinion of Taltech's expert, Mr. Nienke, on U.S. Bodle Patent No. 2,120,458 (Taltech's *Markman* Ex. 8) (the "Bodle Patent"), and on the video shown as part of Taltech's tutorial (Taltech's *Markman* Ex. 7).

Esquel asks the Court to construe "a method ... comprising the steps" to mean that the elements (a)-(g) of these method claims be performed in a particular order. Esquel proposes the following constructions for the two patents-in-suit:

Claim 1 of the '779 Patent recites a method requiring that step (b) be performed after step (a), step (c) be performed after step (b), step (d) be performed after step (b), step (e) be performed after step (b), step (f) be performed after step (c), and step (g) be performed after step (e).

Claim 1 of the '615 Patent recites a method requiring that step (b) be performed after step (a), step (c) be performed after step (b), step (d) be performed after step (c), step (e) be performed after step (d), step (f) be performed after step (e), and step (g) be performed after step (e).

Esquel relies on the claims, on the specifications, and on the prosecution history of the '779 Patent.

[23] "Unless the steps of a method [claim] actually recite an order, the steps are not ordinarily construed to require one." Interactive Gift, 256 F.3d at 1342. To determine if the steps of a method claim that do not otherwise recite an order must nonetheless be performed in the order in which they are written, a court should first "look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order written." Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369 (Fed.Cir.2003) (citing

Interactive Gift, 256 F.3d at 1342-43). For example, if the second step requires the presence of a structure that is formed in the first step, then the claim language itself shows that the steps must be performed in a particular order. *See* Loral Fairchild Corp. v. Sony Corp., 181 F.3d 1313, 1321 (Fed.Cir.1999); *but see* Kemin Foods, L.C. v. Pigmentos Vegetales del Centro, 301 F.Supp.2d 970, 993 (S.D.Iowa 2004) (not requiring steps (a) and (b) to be performed in the order listed even though step (b) refers to "said homogeneous liquid" formed in step (a), because one skilled in the art would understand steps (a) and (b) to be interchangeable). A particular order might also be required if each subsequent step referenced something logically indicating that the prior step had been performed. *See* Mantech Envtl. Corp. v. Hudson Envtl. Servs., Inc., 152 F.3d 1368, 1375-76 (Fed.Cir.1998). If the claim language does not indicate a particular order, then a court should look to the specification to determine whether it "directly or implicitly requires such a narrow construction." *See* Interactive Gift, 256 F.3d at 1343. "If not, the sequence in which such steps are written is not a requirement." Altiris, 318 F.3d at 1370.

In the present case, the claims do not recite an order. Thus, the presumption is that no order is required. Under *Altiris* and *Interactive Gift,* the presumption may be overcome if the logic or grammar of the claim language requires a particular order, or if the specifications directly or implicitly require a particular order. *See* Altiris, 318 F.3d at 1369-70; Interactive Gift, 256 F.3d at 1343. The Court may look to expert testimony to determine whether the presumption is overcome because "the expert testimony serves the permissible purposes of aiding our understanding of the technology and in helping us view the patent through the eyes of the skilled artisan." Altiris, 318 F.3d at 1371 (considering expert testimony that it is technologically possible to achieve the invention's purpose by performing the steps in any order). Although Taltech's expert, Mr. Nienke, did not disclose an opinion on the term "a method ... comprising the steps" in his expert report, *see* docket no. 85, Ex. J (part 1), the Court will consider his opinion in construing this term because Esquel has taken the opportunity to question Mr. Nienke regarding this term in a deposition on December 7, 2005. *See* Nienke Rebuttal Dep. (Esquel's *Markman* Ex. 2-complete transcript).

The first area of dispute between the parties is whether step (b) must come after step (a) in Claim 1 of the '779 Patent. These steps involve "placing" the first and second garment components and the bonding element into position to form a seam. The claim language, as read by a person of ordinary skill in the art, does not require a particular order. Mr. Nienke testifies on behalf of Taltech that he "absolutely" knows that steps (a) and (b) "can be reversed because the bonding element typically comes from a reel or a supply so that it's continuous and the bonding element is present typically under the foot before the garment components are introduced." Nienke Rebuttal Dep. at 30:23-31:13, 31:21-32:12, 47:15-23 (Taltech's *Markman* Ex. 13-highlighted deposition transcript); *see also* Nienke Rebuttal Decl., docket no. 110, para. 5 (Taltech's *Markman* Ex. 11) (explaining how the bonding element can be present (i.e., step (b) before the garment components are brought together (i.e., step (a)). Contrary to Esquel's argument, Mr. Nienke's testimony is not merely conclusory because he explains how step (b) may be performed prior to, or at the same time as, step (a) given how the bonding element comes from a reel and is typically under the foot before the garment components are introduced. Nienke Rebuttal Dep. at 31:21-32:12 (Taltech's *Markman* Ex. 13). Mr. Nienke's testimony is unrebutted. Furthermore, the specification of the '779 Patent implicitly requires no particular order to steps (a) and (b) because the description of the seam manufacturing process in the specification begins with the sewing of the first stitch, not with the placement of the garment components and bonding element. '779 Patent at 4:4-7 ("After the bonding element 32, first garment component 20, and second garment component 22 are positioned as shown in [Figure] 3a, a first stitch 38 is sewn along the seam line defined by the first and second garment components."); Fig. 3a (showing first step with the garment components and the bonding element in place and the first stitch sewn). This specification implies that the timing of the positioningof the bonding element and the garment components together is

unimportant. The Court concludes that the patent does not require step (b) in Claim 1 of the '779 Patent to come after step (a).

Similarly, the parties dispute whether steps (a), (b) and (c) in Claim 1 of the '615 Patent need to be performed in any particular order. These steps involve "providing" the first and second garment components and bonding element in positions relative to each other. Again, as with steps (a) and (b) of the '779 Patent, the claim language, as read by a person of ordinary skill in the art, does not require a particular order. Mr. Nienke testifies that steps (a) and (b) in Claim 1 of the '615 Patent can occur simultaneously and that step (c) can occur before, after, or simultaneously with either of steps (a) and (b). Nienke Rebuttal Decl., docket no. 110, para. 6 (Taltech's *Markman* Ex. 11). He further testifies that the order of these steps does not affect the ultimate structure and folding described in the claim. *Id*. This testimony is analogous to the testimony in *Altiris* that it was technologically possible to achieve the invention's purpose by performing the "setting" step before, during, or after the "booting normally" step. *See* 318 F.3d at 1371. Mr. Nienke's testimony is unrebutted. Furthermore, as with steps (a) and (b) in Claim 1 of the '779 Patent, the specification of the '615 Patent begins its description of the seam manufacturing process with the sewing of the first stitch, thus indicating that the timing of the positioning of the bonding element and the garment components together is unimportant. '615 Patent at 4:5-8; Fig. 3a. The Court concludes that steps (a), (b) and (c) in Claim 1 of the '615 Patent do not need to be performed in any particular order.

Both parties agree that the first and second garment components and the bonding element must be in position before the first stitch is sewn. Thus, step (c) must come after steps (a) and (b) in Claim 1 of the '779 Patent, and step (d) must come after steps (a), (b) and (c) in Claim 1 of the '615 Patent.

Both parties also agree that the folding of the first garment component over the bonding element must occur after the bonding element is in place; thus step (d) must come after step (b) in Claim 1 of the '779 Patent, and step (e) must come after step (c) in Claim 1 of the '615 Patent. In Claim 1 of the '615 Patent, step (e) must also come after step (d) because step (e) requires the presence of the first set stitch introduced in step (d).FN8

FN8. The parties agree that step (e) must come after step (d) in Claim 1 of the '615 Patent.

The next area of dispute is whether step (e) must come after step (b) in Claim 1 of the '779 Patent.FN9 Step (e) involves the folding of a portion of the second garment component such that the lower surface of the second garment component abuts the lower surface of the bonding element. Mr. Nienke has testified that step (e) can occur before, after, or simultaneously with the "placing" of the bonding element in step (b). Nienke Rebuttal Decl., docket no. 110, para. 7 (Taltech's *Markman* Ex. 11); Nienke Rebuttal Dep. at 51:4-13 (Taltech's *Markman* Ex. 13). The Court does not rely on Mr. Nienke's testimony given Taltech's clearly stated position that "in claim 1 of the '779 Patent, the logic and language of the claim indicates that step (d) occurs after step (b)...." Taltech's Supplemental Brief, docket no. 137, at 7. If step (d) must come after step (b), then so must step (e) because step (d) involves the folding of the first garment component over the bonding element, and step (e) involves the folding of the second garment component over the bonding element. Both steps (d) and (e) require the presence of the bonding element. The Court concludes that the logic and the grammar in Claim 1 of the '779 Patent require step (e) to come after step (b).

FN9. Claim 18 of the '779 Patent makes it clear that step (e) may come before step (c). '779 Patent at 7:66-8:2 ("step (e) is performed prior to step (c)").

The next area of dispute is whether step (f) must come after step (c) or after step (b) in Claim 1 of the '779 Patent. In step (b), the bonding element is introduced. In step (c), the first stitch is sewn. In step (f), the second stitch is sewn. Esquel argues that step (f) must be performed after step (c). The Court agrees because the Court construes "first" and "second" stitch to be temporally limited to that order (see construction of "first stitch" and "second stitch," above). The Court concludes that step (f) must come after step (c) in Claim 1 of the '779 Patent.

Both parties agree that steps (f) and (g) must be performed after step (e) in Claim 1 of the '615 Patent and that step (g) must be performed after step (e) in Claim 1 of the '779 Patent. Indeed, the folding that takes place in step (e) must occur prior to these other steps.

This construction, which requires that certain steps be performed in a particular order, is consistent with the specifications' reference to the "progressive manufacturing steps" shown in Figures 3a-3c. '779 Patent at 3:36-37; '615 Patent at 3:37-38. The Court does not, however, impose the strict limitations imposed by the words "after" and "next" from the description of the preferred embodiment shown in Figures 3a-3c. '779 Patent at 4:4-25; '615 Patent at 4:5-26. For example, this preferred embodiment requires the first garment component to be folded over the bonding element (i.e., step (d)) after the first stitch is sewn (i.e., step (c)). Neither party proposed a construction requiring that step (d) come after step (c). To so require would be to improperly limit the claims by the preferred embodiment.

The prosecution history of the '779 Patent shows that Taltech distinguished the prior art (i.e., the Benstock patent) by stating that this invention prevents seam puckering during subsequent laundering "due to the *novel sequence of steps* and novel positioning of garment components and sewing with respect to a bonding element." '779 Prosecution History, March 11, 1996, Amendment Filed Under 37 C.F.R. s. 115, docket no. 85, Ex. D (part 2) at 15 (emphasis added). Taltech's reference to the "novel sequence of steps" is not an "explicit argument" requiring that the steps be performed in the exact order as listed in the claims. *See* Spectrum Int'l, Inc. v. Sterilite Corp., 164 F.3d 1372, 1378-79 (Fed.Cir.1998) ("[E]xplicit arguments made during prosecution to overcome prior art can lead to narrow claim interpretations ..."). This statement in the prosecution history is insufficient to overcome the presumption that no order is required.

Accordingly, the Court construes the term "a method ... comprising the steps" as follows:

Claim 1 of the '779 Patent recites a method requiring that step (c) be performed after steps (a) and (b), that steps (d) and (e) be performed after step (b), that step (f) be performed after step (c), and that step (g) be performed after step (e).

Claim 1 of the '615 Patent recites a method requiring that step (d) be performed after steps (a), (b) and (c), that step (e) be performed after step (d), and that steps (f) and (g) be performed after step (e).

11. "***Folding ... Such That***"

[24] The term "folding ... such that" is found only in the method claims of the patents-in-suit. For example, in Claim 1 of the '779 Patent, a method claim, step (d) of the seam manufacturing process requires "folding the first garment component over the bonding element such that the upper surface of the first garment component is folded over and abuts an upper surface of the bonding element." '779 Patent at 6:40-43

(emphasis added). Also in Claim 1 of the '779 Patent, step (e) of the seam manufacturing process requires "folding a portion of the second garment component such that a lower surface of the second garment component abuts the lower surface of the bonding element. " '779 Patent at 6:44-46 (emphasis added). In Claim 1 of the '615 Patent, step (e) requires "folding the first garment component over the bonding element such that the upper surface of the first garment component is folded over and abuts an upper surface of the bonding element along the seam.... " '615 Patent at 6:48-51 (emphasis added).

Taltech asks the Court to construe "folding ... such that" to mean "folding, which creates, maintains, or results in the relationship described following 'such that.' " Taltech relies on the claims, on the specifications, on dictionary definitions of "such" and "such that," on the opinion of Taltech's expert, Mr. Nienke, and on the Bodle Patent (Taltech's *Markman* Ex. 8). Esquel asks the Court to construe "folding ... such that" to mean "folding which creates or results in the relationship described following 'such that.' " Esquel relies on the claims and on the specifications.

The parties' dispute centers on Taltech's inclusion of the word "maintains" in its proposed construction. Taltech argues that the relationships described after "such that" are present after folding, but not necessarily as a causal result of the folding. Taltech argues that construing "folding ... such that" to require a causal relationship narrows the ordinary meaning of the term.

For the reasons outlined above in the discussion of the term "a method ... comprising the steps," and specifically regarding the determination that step (e) must come after step (b) in Claim 1 of the '779 Patent, the Court does not rely on the opinion of Taltech's expert, Mr. Nienke, who says that the folding can occur before, or at the same time that, the bonding element is placed along the seam. *See* Nienke Rebuttal Decl., docket no. 110, para. 7 (Taltech's *Markman* Ex. 11). The bonding element must be present prior to the folding of the first and second garment components.

Taltech submits the "to the extent that" definition of "such that" in support of its "no causation required" construction. *See Compact Oxford English Dictionary* (Catherine Soanes & Sara Hawker eds., Oxford Univ. Press 3d ed.2005), *available at* http://www.askoxford.com/concise_oed/such?view=uk (docket no. 94, Ex. C). Taltech also submits the "of a degree or quality specified" definition of "such that" in support of its construction. *See* Dictionary.com Definition of "such that", http:// dictionary.reference.com/search?q+such% 20that (last visited Aug. 19, 2005) (docket no. 94, Ex. D). Taltech has not incorporated these definitions into its proposed construction, and these definitions do not preclude an exclusively causal interpretation of "folding ... such that."

Esquel argues that Taltech's proposed construction improperly reads "such that" out of the claim. *See* BBA Nonwovens Simpsonville, Inc. v. Superior Nonwovens, LLC, 303 F.3d 1332, 1344 (Fed.Cir.2002) (rejecting claim construction that reads a limitation out of the claims). The Court agrees. "Such that" must be given some meaning that connects the action of "folding" to the relationship described following "such that." A causal requirement for "such that" is supported by other claim language that demonstrates a clear connection between an action (other than folding) and the relationship described following "such that." *See, e.g.,* Claim 1(g) of the '779 Patent at 6:50-52 ("applying sufficient heat and pressure to said bonding element ... such that said adhesive flows ...").

Accordingly, the Court adopts Esquel's proposed construction and construes the term "folding ... such that" to mean "folding, which creates or results in the relationship described following 'such that.' "

12. "*Thermal Adhesive Web*"

[25] The term "thermal adhesive web" is found in both the method and product claims of the patents-in-suit. For example, Claim 10 of the '779 Patent, a method claim dependent on Claim 1, requires that "said bonding element is a thermal adhesive web or net composed entirely of a thermal adhesive." '779 Patent at 7:25-28 (emphasis added). Claim 11, a method claim dependent on Claim 10, states that "said thermal adhesive web is composed of a plurality of adhesive filaments having a diameter ranging approximately between 20 to 80 microns." '779 Patent at 7:29-33 (emphasis added). Claim 12, another method claim dependent on Claim 10, states that "said thermal adhesive web has a density of approximately 10 to 100 grams per square meter. " '779 Patent at 7:34-37 (emphasis added). Claim 27 of the '779 Patent, a product claim dependent on Claim 20, states that "said bonding element is a thermal adhesive web composed entirely of thermal adhesive." '779 Patent at 9:3-5 (emphasis added). Claims 2-4 of the '615 Patent use the term exactly as it was used in Claims 10-12 of the '779 Patent. '615 Patent at 7:1-10. Claim 20 of the '615 Patent uses the term exactly as it was used in Claim 27 of the '779 Patent. '615 Patent at 8:34-36.

Taltech asks the Court to construe "thermal adhesive web" to mean "a random array of thermal adhesive material." Taltech relies on the claims, on the specifications, and on the opinion of Taltech's expert, Dr. David Hall. Esquel asks the Court to construe "thermal adhesive web" to mean "a two dimensional structure made by randomly crossing thermal adhesive fibers" to create openings. Esquel relies on the specifications and on specialized dictionary definitions of "web." Both parties agree that "thermal adhesive web" has a "random" element to it. Both parties use "thermal adhesive" in their proposed constructions of "thermal adhesive web." The parties' dispute centers on whether a "thermal adhesive web" must be fibrous (i.e., containing filaments) and whether it must have openings.

Esquel asserts that a "thermal adhesive web" must be fibrous. The *Glossary of Fusible Interlining Technology* defines "adhesive web" as "an adhesive resin in form of a fibrous network." INDA, Ass'n of the Nonwoven Fabrics Indus., *Glossary of Fusible Interlining Technology,* Bobbin, Oct. 1981, at 57 (docket no. 97, Ex. J at 57). The *Man-Made Textile Encyclopedia* defines "web" as "[a] random fibrous structure used in the manufacture of nonwoven textiles." *Man-Made Textile Encyclopedia* 901-02 (1959) (docket no. 97, Ex. B at 901-02). Despite the reference to "fibrous" structures in these definitions, the Court reads the term "thermal adhesive web" to require fibers or filaments only when the claims themselves use such language. As outlined above, Claim 11 of the '779 Patent, which has not been placed directly at issue here, defines thermal adhesive web as being composed of filaments having a certain diameter. In contrast, the language in Claim 10 of the '779 Patent merely requires that the thermal adhesive web be composed "entirely of thermal adhesive." The inclusion of the specific "filaments"limitation in Claim 11 indicates that the limitation does not properly belong in all claims. The Court applies the principles of claim differentiation to give the other claims a broader scope because to read otherwise would make Claim 11 redundant. *See* Phillips, 415 F.3d at 1324-25.

In its effort to construe "thermal adhesive web" to include fibers (i.e., filaments), Esquel argues that the '779 Patent specification's "preferred embodiment" refers to "the adhesive web" as being "manufactured from a plurality of *filaments* ...." '779 Patent at 3:62-63 (emphasis added). The Court refuses to import limitations from a "preferred embodiment" outlined in the specification into the claims. *See* Eolas Techs. Inc. v. Microsoft Corp., 399 F.3d 1325, 1337 (Fed.Cir.2005) (commenting that it is improper to limit claims to the preferred embodiment).

In addition to a fibrous structure, Esquel proposes a construction that would require openings in the thermal

adhesive web. The patents-in-suit do not discuss or illustrate "openings" of any kind in the thermal adhesive. As a result, the Court does not interpret the term to require openings.

The specifications of the patents-in-suit distinguish a thermal adhesive "web" from a "net" by characterizing a net as being "more solid structured" than a web. '779 Patent at 3:53-4:2; '615 Patent at 3:54-4:3. The Court incorporates this language into its construction of the terms "thermal adhesive web" and "thermal adhesive net." Nothing in the claims indicates that "net" should not be interpreted as being more solid structured than a "web" across all claims.

Accordingly, the Court adopts Taltech's proposed construction,FN10 with modification, and construes the term "thermal adhesive web" to mean "a random array of thermal adhesive material that is less solid structured than a thermal adhesive net."

FN10. In adopting Taltech's proposed construction, the Court does not rely on the opinion of Taltech's expert, Dr. Hall, *see* Hall Decl., docket no. 95, para.para. 5-6, because it is merely conclusory. *See* Phillips, 415 F.3d at 1318.

13. "***Thermal Adhesive Net***"

[26] The term "thermal adhesive net" is found only in the method claims of the patents-in-suit. For example, Claim 5 of the '779 Patent, a method claim dependent on Claim 1, requires that "said bonding element is a thermal adhesive net having a density of approximately 8 to 80 grams per square meter. " '779 Patent at 7:5-7 (emphasis added). Claim 10 of the '779 Patent, another method claim dependent on Claim 1, requires that "said bonding element is a thermal adhesive web or net composed entirely of a thermal adhesive. " '779 Patent at 7:25-28 (emphasis added). Claim 12 of the '615 Patent uses the term in the exact same way as it was used in Claim 5 of the '779 Patent. '615 Patent at 7:36-39.

Taltech asks the Court to construe "thermal adhesive net" to mean "a regular array of thermal adhesive material." Taltech did not provide any new arguments regarding this term in addition to those presented for the term "thermal adhesive web." Esquel asks the Court to construe "thermal adhesive net" to mean "a two dimensional structure made by crossing thermal adhesive fibers at regular intervals." Esquel relies on the specifications and on general purpose and specialized dictionary definitions of "net." Both parties agree that "thermal adhesive net" has a "regular" element to it. Both parties use "thermal adhesive" in their proposed constructions of "thermal adhesive net." The parties' dispute centers on whether a "thermal adhesive net" must be fibrous and whether it must have openings.

The Court finds Taltech's less restrictive construction more persuasive. For the same reasons outlined above in the discussion of "thermal adhesive web," the Court rejects Esquel's requirements that the net be fibrous and have openings. The Court declines to impose any limitations from the dictionary definitions provided by Esquel onto the claims.

As noted in the discussion of "thermal adhesive web," the specifications of the patents-in-suit distinguish a thermal adhesive "web" from a "net" by characterizing a net as being "more solid structured" than a web. '779 Patent at 3:53-4:2; '615 Patent at 3:54-4:3. The Court incorporates this language into its construction of the terms "thermal adhesive web" and "thermal adhesive net." Nothing in the claims indicates that "net" should not be interpreted as being more solid structured than a "web" across all claims.

Accordingly, the Court adopts Taltech's proposed construction, with modification, and construes the term "thermal adhesive net" to mean "a regular array of thermal adhesive material that is more solid structured than a thermal adhesive web."

III. *CONCLUSION*

The Court has construed the thirteen disputed claim terms in this case as set forth above.

IT IS SO ORDERED.

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