IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF NEBRASKA

TAMA PLASTIC INDUSTRY, Plaintiff, v. PRITCHETT TWINE & NET WRAP, LLC, and JOSEPH JERALD PRITCHETT, Defendants.	)	8:12CV324 MEMORANDUM AND ORDER

This matter is before the Court for the construction of patent claim terms in accordance with *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). In this case, Tama Plastic Industry ("Tama") alleges infringement of United States Patent Number 6,521,551 ("the '551 Patent") by Pritchett Twine & Net Wrap and Joseph Jerald Pritchett (collectively "Pritchett" or "Pritchett defendants"). The parties have submitted proposed claim constructions, opening and responsive briefs, and corresponding indices of evidence, and the Court heard oral arguments on May 20, 2014. After consideration of the briefs, evidence, oral argument, and relevant law, the Court will rule as follows.

I. Background and Procedural History

There are three United States Patent and Trademark Office ("PTO") documents related to the this case. The first is

United States Patent 5,256,353 (the "Lieber patent"). Yuval Lieber filed his application in 1991 and received his patent October 26, 1993. Filing No. 273-8, at 2. The Lieber patent is entitled "METHOD OF MAKING ELASTIC PLASTIC NETTING MADE OF ORIENTED STRANDS." *Id.*

Second, Yuval Lieber filed a United States Patent Application, 08/978,235 ("Parent application"), on November 25, 1997. Filing No. 273-14, at 2. The Parent application was entitled "MODIFIED SHUSS KNITTED NETTING." *Id.* at 4. The PTO rejected the Parent application as anticipated by the Lieber patent. *Id.* at 8-9.

Third, Tama filed the application for the '551 patent. The '551 is also entitled "MODIFIED SHUSS KNITTED NETTING" and was issued February 18, 2003 (Filing No. 273-1) from an application filed August 21, 2000, with the PTO. During the prosecution process, the PTO rejected all of Tama's claims. Filing No. 273-7, at 154-56. A major issue, in the eyes of the PTO, was whether the '551 patent was distinct from a "Reduced

Distance Net."[1] *Id.* at 165. After Tama made certain amendments, the PTO allowed the '551 patent.

The '551 patent abstract describes the invention.

> A knitted netting includes longitudinal polyolefin ribbons and lateral polyolefin ribbons knitted with the longitudinal polyolefin ribbons to form knitted netting. The lateral polyolefin ribbons of the knitted netting have an actual shuss length more than 110% of a calculated shuss length for the knitted netting. The actual shuss length being in excess of 110% of the calculated shuss length of the knitted netting prevents transverse shrinkage of the netting.

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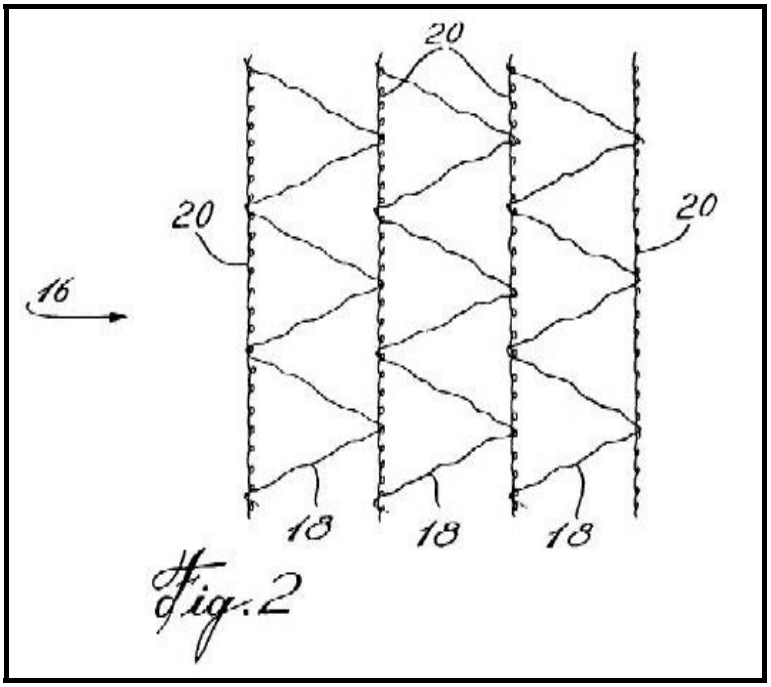
[1] The defendants offer the following definition:

> "Reduced Distance Net" . . . is netting that exhibits slack in one or more lateral polyolefin ribbon of greater than 10% because it was manufactured in a conventional manner at a width which is greater than the width at which the net is subsequently placed on a roll for subsequent sale and/or use. For any given roll width "Reduced Distance Net" can be distinguished from a net made according to the claimed invention as the "Reduced Distance Net" will have more longitudinal ribbons when both nets are made using the same needle spacing for the needles which knitted the longitudinal ribbons into the netting.

Filing No. 272, at 54.

Filing No. 273-1, at 1. Essentially, the invention is an elastic net used for wrapping hay. The elasticity of the net allows the net to stretch across the bail without shrinking the net.

The following is a diagram showing a "knitted Raschel netting in accordance with the invention," Figure 2 of the '551 patent. Filing No. 273-1, at 3. "Raschel" refers to a machine which performs mass needle-and-stitch work. Number 18 is directed toward a line on the diagram called a "Schuss," which is a German word meaning "shoot." Number 20 is directed toward a line called the "Franse," which is a German word meaning "fringe." The Franse and Schuss are manufactured into this pattern to create the net.



Tama filed this action against the Pritchetts and other defendants in the Southern District of Indiana in June 2011. There, Tama alleged that the defendants manufactured goods in China in violation of its patent and then shipped those goods to Nebraska, among other places. Filing No. 189, at 1. Several defendants were terminated from this action and now the suit is exclusively between Tama and the Pritchett defendants. *Id.* at 2. Despite opposition from both parties, the Indiana Court transferred the action to Nebraska, the residence of the Pritchetts.

In Nebraska, Pritchett was granted a partial stay in litigation pending a reexamination of patent '551. Filing No. 236, at 11. On August 6, 2013, the PTO issued a Notice of Intent to Issue an Ex-Parte Reexamination Certificate, confirming the patentability of all the claims in question. Filing No. 245, at 1. Thereafter, the parties began motion practice for the *Markman* hearing, which was held May 20, 2014.

II. Legal Standard

"It is, of course, '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.'" *Medegen MMS, Inc. v. ICU Medical, Inc.*, 317 Fed. Appx. 982, 986 (Fed. Cir. 2008) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir.

2005) (en banc)) (internal quotations omitted). In construing a claim term, the Court must give, to the extent possible, each term its "ordinary and customary meaning, as [it] would be understood by one of ordinary skill in the art in question at the time of the invention." *Intervet Inc. v. Merial Ltd.*, 617 F.3d 1282, 1287 (Fed. Cir. 2010) (citing *Phillips*, 415 F.3d at 1312-13).

The Court's construction of these terms considers "sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." *Phillips*, 415 F.3d at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). These sources include: (1) the patent claims themselves; (2) the remainder of the patent's specification; (3) the patent's prosecution history; and (4) extrinsic evidence pertaining to relevant scientific principles, such as a technical term's meaning and the state of the art. *Phillips*, 415 F.3d at 1314.

First, the Court begins with the words of the claims to define the scope of the patented invention. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). "The written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of

claims." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996).

The meaning of a term in one claim illustrates the meaning of that word in other claims. *See Phillips*, 415 F.3d at 1314-15. "Where claims use different terms, those differences are presumed to reflect a difference in the scope of the claims." *Forest Labs., Inc. v. Abbott Labs.*, 239 F.3d 1305, 1310 (Fed. Cir. 2001).

Second, the Court uses specifications to analyze the terms. Specifications are "always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315 (quoting *Vitronics*, 90 F.3d at 1582). "Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips*, 415 F.3d at 1313. Specifications contain a written description of the invention, the manner and process of making and using it, and the best mode contemplated by the inventor of carrying out the invention. *See* 35 U.S.C. § 112(a).

Because "the specification often describes very specific embodiments of the invention, we have repeatedly warned

against confining the claims to those embodiments." *Phillips*, 415 F.3d at 1323. While the specification may shed contextual light on the plain and ordinary meaning, they cannot be used to narrow a claim term to deviate from the plain and ordinary meaning unless the inventor acted as his own lexicographer or intentionally disclaimed or disavowed claim scope. *See Aventis Pharm. Inc. v. Amino Chem. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013). Thus "[t]he longstanding difficulty is the contrasting nature of the axioms that (a) a claim must be read in view of the specification and (b) a court may not read a limitation into a claim from the specification." *Innova*, 381 F.3d at 1117.

Third, the Court looks to the prosecution history of the patent to ascertain the true meaning of language used in the patent claims. *See Markman*, 52 F.3d at 980. "This history contains the complete record of all the proceedings before the [PTO], including any express representations made by the applicant regarding the scope of the claims. Thus, the record before the [PTO] is often of critical significance in determining the meaning of the claims." *Vitronics*, 90 F.3d at 1582. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating 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." *Phillips*, 415 F.3d at 1317.

"The public notice function of a patent and its prosecution history requires that a patentee be held to what he declares during the prosecution of his patent." *Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 995 (Fed. Cir. 2003). "A patentee may not state during prosecution that the claims do not cover a particular device and then change position and later sue a party who makes that same device for infringement." *Id.* "'The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution.'" *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005).

III. Claim Construction

Generally, the issue before the Court is the effect of the various encounters with the '551 patentees and the PTO office to determine whether the patentees disclaimed certain aspects of the patent. The defendants' definitions assume the disclaimers occurred and therefore limit the patent. Tama insists that no disclaimers occurred and that plain meaning controls. The Court notes the parties agreed at oral arguments that the term "at least 10% greater than" should be given its plain, ordinary

meaning, and, therefore, the Court defers to the parties' agreement.

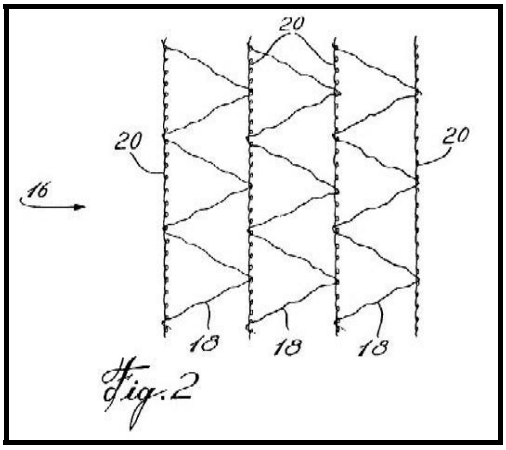
A. **"Longitudinal Polyolefin Ribbons"** (Claims 1, 13, 24, and 29)

Tama's Proposed Construction	Pritchett's Proposed Construction
Ribbons of polyolefin that run in the lengthwise direction in a knitted netting. Also, "Franze" ribbons.	"Longitudinal ribbons, made of polyolefin, which will stretch more than about 20% before they break."

At oral arguments, the parties referred to these ribbons as Franze, vertical ribbons, and longitudinal ribbons. For clarification of the record, these various terms describe item 20 on Figure 2.

1. The Claim Language.

Tama states the plain, ordinary meaning of "Longitudinal Polyolefin Ribbons" because it is clear on its face. Pritchett claims that the invention requires elastic polyolefin, able to stretch more than 20% before breaking. The term "Longitudinal Polyolefin Ribbons" appears throughout the patent claims and figures.



2. Specification Disclosure.

> Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question.

Thorner v. Sony Computer Entm't Am. LLC, 669 F.3d 1362, 1366 (Fed. Cir. 2012) (quoting *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001)). "Generally, a claim is not limited to the embodiments described in the specification unless the patentee has demonstrated a clear intention to limit the claim's scope with words or expressions of manifest exclusion or restriction. . . . By the same token, not every benefit flowing from an invention is a claim limitation." *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 843 (Fed. Cir.

2010) (quotation and citation omitted), *aff'd*, 131 S. Ct. 2238 (2011).

According to Pritchett, a specification requires an addition of a 20% stretch requirement into this claim's construction. The '551 patent reads "[t]he preferred amount of elongation of the shuss length depends upon the particular netting application. For elastic pallet wrapping, the preferred actual shuss length is about 135% of the calculated shuss length for the netting. For conventional wrapping netting with an elongation at break of about 20%, a modified shuss is not needed because such netting only elongates about 1—3% in normal use and does not exhibit transverse shrinkage." '551 patent, col. 3, line 19-26. Pritchett reads this language to require longitudinal polyolefin ribbons to stretch more than 20% before breaking. This reading cannot withstand scrutiny. The language of the specification is far from the clear intention required to limit the scope of the modified shuss claims. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004), *Epistar Corp. v. Int'l Trade Comm'n*, 566 F.3d 1321, 1337 (Fed. Cir. 2009). The specification qualifies its language with words such as "preferred amount of elongation" and "not needed." It does not follow that a modified shuss could not be used with less elasticity, even though it may not be preferred or needed.

Therefore, the specifications do not clearly require the longitudinal polyolefin ribbons to stretch 20% before breaking and the Court will give this term its plain, ordinary meaning. The Court adopts Tama's construction.

B. **"Calculated Ribbon Length"** (Claims 1, 13, 24, and 29)

Tama's Proposed Construction	Pritchett's Proposed Construction
A lateral (shuss) ribbon in a knitted netting in the context of a triangle pattern wherein calculated ribbon length is defined as the "calculated shuss length" in the '551 Patent at column 3, lines 27-64 and in Figure 3c.	The length of lateral ribbon which is needed for a given knitting pattern with two adjacent longitudinal ribbons so that the lateral ribbon is taut when the adjacent longitudinal ribbons are also taut and spaced apart at the distance they were at the time of manufacture of the netting, which is the spacing of the adjacent knitting needles on the Raschel knitting machine that knitted the longitudinal ribbons into the netting.

1. Specification Disclosure.

The specification, column 3, lines 27-64, defines the term "Calculated Ribbon Length." Essentially, the method of calculating the ribbon length is the Pythagorean theorem ($A^2 + B^2 = C^2$).

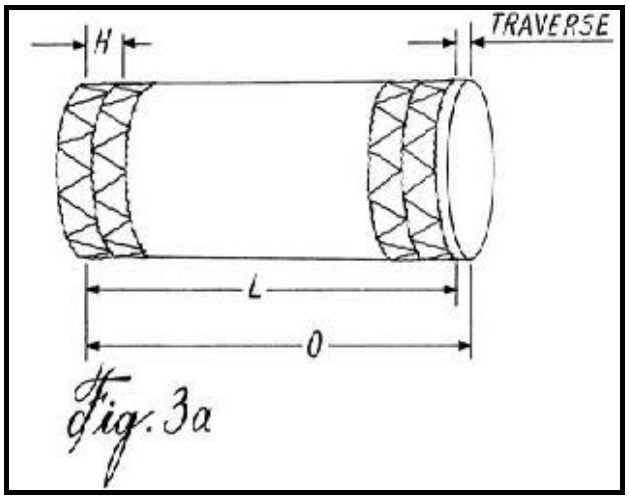


Fig. 3a

Patent '551 first requires the measurement of the average length of the roll on which the netting sits (O in Figure 3a) and the length of the entire netting from the two extreme franzes (L in Figure 3a). The length measurement must then be divided by the number of franzes, minus one, in order to calculate the average length between the franzes (H in Figure 3c).

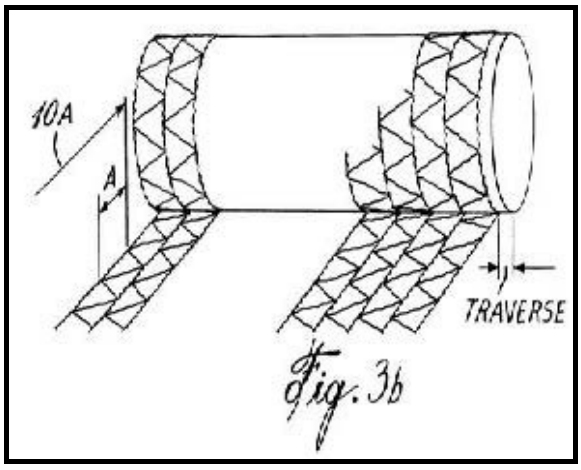


Fig. 3b

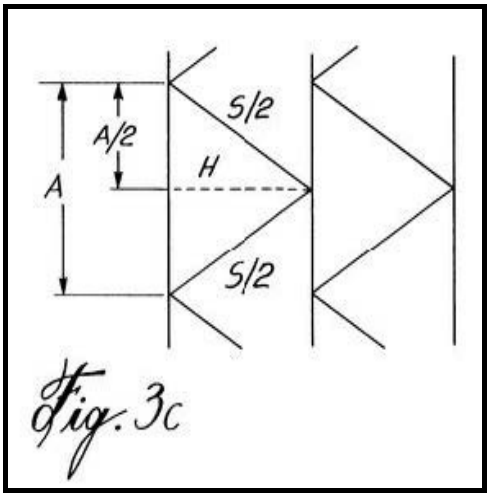


Fig. 3c

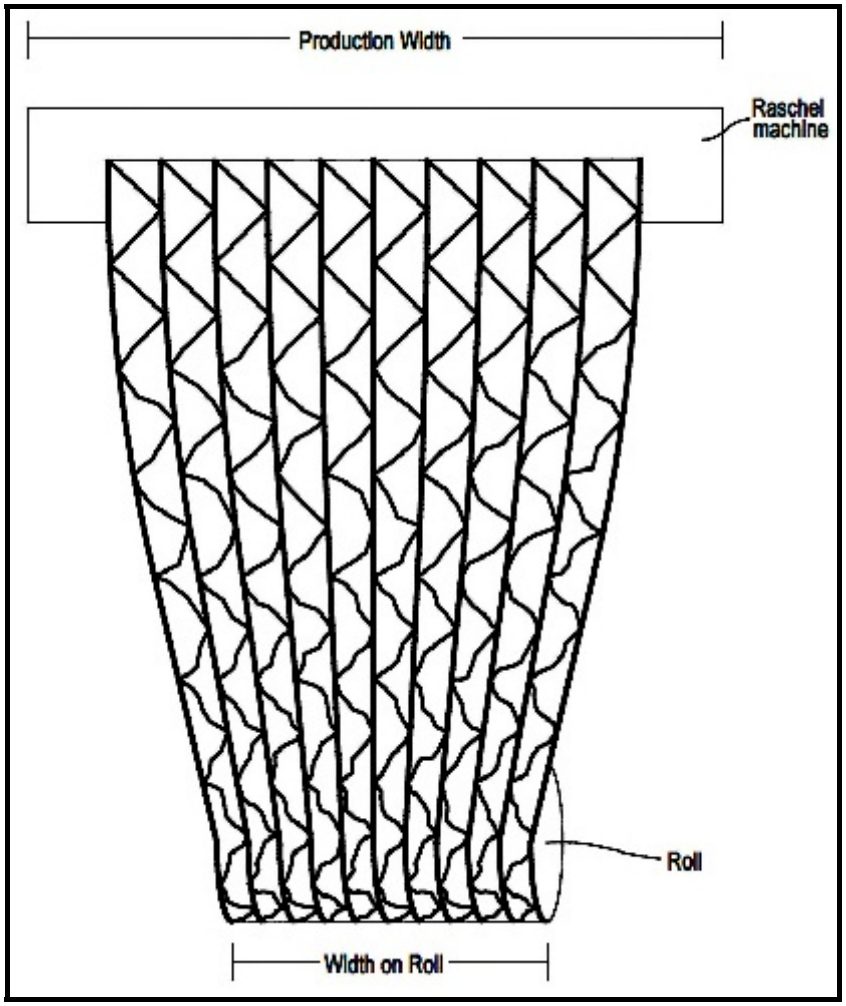
Second, the '551 patent calls for the unrolling of the netting to allow for the measure of ten bases (10A in Figure 3b). A base, in this sense, is the length of the Franze between two Shusses. The total measurement of the ten bases is then divided by ten to calculate an average base (A in Figure 3c).

From these averaged lengths of the distances between Franzes (H in Figure 3a) and Shusses (A in Figure 3c), the patent finally gives the following algebraic formula to calculate the ribbon length (S/2 in Figure 3c): $S = 2\sqrt{((A/2)^2 + H^2)}$. The parties agree, in spirit if not form, with these underlining mathematic principles.

The parties diverge on the issue of "Reduced Distance Net." In the prosecution of the '551 patent, the examiner rejected Tama's claims in its application because "actual ribbon length that is at least 10% greater than a calculated ribbon length" was indefinite and lacked a specified tension. Filing No. 273-7, at 154. Without a constant tension, the examiner reasoned, the measurement of the shuss could be manipulated.

By way of example, the Pritchett defendants have supplied the following image to illustrate the examiner's position. It shows different net lengths on the top and the bottom. At the top, the netting is just coming out of the Raschel machine; this length is the "manufacture length." At the

bottom, the netting is wrapped around a roll which has a width less than that of the Raschel machine; this length is the "roll length."



The examiner postulated that all netting whose roll length was less than its manufacture length was effectively "scrunched" and its "calculated ribbon length" from the roll would be 10% greater than the actual shuss length. Therefore, the calculations defining a modified shuss could also include a "Reduced Distance Net." Without a tension basis, the examiner declared the calculation indefinite. Tama then persuaded the examiner to change her position through an amendment to the patent.

The issue is whether Tama made statements to the examiner constituting a "clear and unmistakable" disclaimer. *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009). The Pritchett defendants have not satisfied the legal requirement that such evidence be clear and unmistakable. The defendants cannot point to a statement which disclaims "reduced distance netting" but instead infers a disclaimer because the PTO changed its opposition to the patent. The record specifically explains the PTO relented because of Tama's amendments and the record offers no other clear explanation. Filing No. 270-11, at 9. This lack of substantive support of the defendants' position is fatal and the Court cannot establish a disclaimer without such evidence. Therefore, the Court adopts the plaintiff's definition of "calculated ribbon length" -- "[a] lateral (shuss) ribbon in a

knitted netting in the context of a triangle pattern wherein calculated ribbon length is defined as the 'calculated shuss length' in the '551 Patent at column 3, lines 27-64 and in Figure 3c."

C. **"Knitted with" terms** (Claims 1, 13, 24, and 29)

Tama's Proposed Construction	Pritchetts' Proposed Construction
Netting having a plurality of lateral polyolefin ribbons and longitudinal polyolefin ribbons, where a lateral polyolefin ribbon is interconnected with a longitudinal polyolefin ribbon with at least one loop. The netting is not limited by the specific knitting machine or processes used to produce the netting. + **"lateral polyolefin ribbons"** are ribbons of polyolefin that have some lateral path in a knitted netting. + **"Raschel"** modifies "knitted netting" and refers to a netting in a warp knitted configuration.	Each of the phrases means longitudinal polyolefin ribbons knitted with lateral polyolefin ribbons on a Raschel knitting machine having a modified trick plate to form a netting that could not have otherwise been made on a Raschel knitting machine having a conventional trick plate. **"Knitted"** in the above means the lateral polyolefin ribbons are interlocked with the longitudinal polyolefin ribbons in an interlooped configuration. **"Interlooped"** means a lateral ribbon forms a loop that is interlocked with a loop formed by a longitudinal ribbon.

The parties disagree whether the words "knitted with" should define the method the longitudinal and lateral ribbons are connected. Tama states the '551 patent does not require one ribbon to be knitted with the other. Filing No. 269, at 23. The

Pritchett defendants believe the Court should apply the plain, ordinary meaning of "knitted with" to a person of ordinary skill in the art.

The plain, ordinary meaning to a person of ordinary skill in the art of "knitted with" will control. Tama tries to broaden the verb "to knit" into "to connect." According to Tama, knitting is not a limitation as to whether or how the ribbons in the claims or specifications are to be connected. Filing No. 284, at 23. Though Tama admits that claims require the ribbons to connect and become part of the netting, Tama asserts "knitted with" does not require that one ribbon be knitted to the other. *Id.* at 23.

Tama instead explains "knitted with" refers to the "pillar stitches"[2] of the longitudinal ribbons. Essentially, Tama's definition of "knitted with" includes whenever a non-knitted ribbon is connected to a knitted (pillar stitch) ribbon, because the pillar stitch is actually knitted. Tama cites the specifications to assert "the lateral ribbons are in contact with the longitudinal ribbons, and the longitudinal ribbons are 'knitted' with or in the presence of lateral ribbons, which

[2] The parties agree that pillar stitches are knitting, but the Pritchett defendants do not agree that the existence of pillar stitches satisfies the "knitted with" language. Filing No. 273-4, at 6-7.

result in knitted netting." *Id.* at 24. These arguments lack merit.

The Court begins with the standard and heavy presumption that the Court must give the term its ordinary and customary meaning, when practicable, as understood by one of ordinary skill in the art. *See Intervet Inc.*, 617 F.3d at 1287. According to the Pritchett defendants' expert, Don Ward, knitting is "the process of *interlocking* loops formed by one or more threads to produce a product." Filing No. 273-4, at 4-5. The Pritchett defendants submitted a textbook, Knitting Technology. In that book, there are three principal methods of mechanically manipulating yarn into textile fabrics: interweaving, intertwining, and interlooping. *Id.* "Knitting is the most common method of interlooping." Interlooping is defined as forming yarn "into loops each of which is typically only released after a succeeding loop has been formed and intermeshed with it so that a secure ground loop structure is achieved." *Id.*

Tama admits that a laid-on ribbon, the method by which Tama connects the longitudinal and lateral ribbons in its preferred embodiment, may not itself be "knitted." Filing No. 284, at 25. Laying-in is a method where a "ground structure of knitted (overlapped) threads which hold in position other non-knitted threads which were incorporated (laid in) into the

structure during the same knitting cycle." Filing No. 273-4, at 5. A person of ordinary skill in the art understands the distinction between "laying-in" and knitting one ribbon with another.

Tama attacks the Pritchett defendants' definition of "knitted with" because it would exclude its preferred embodiment of its netting. Filing No. 284, at 26 (citing *MBO Labs. Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007)). However, the Pritchett defendants did not create the definition of "knitted with" out of full cloth. It was the very language Tama used in its claims and its ordinary and customary meaning as understood by one of ordinary skill in the art. *Miken Composites L.L.C. v. Wilson Sporting Goods Co.*, 515 F.3d 1331, 1337 (Fed. Cir. 2008) (citing *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 951 (Fed. Cir. 1993)). The Court will not allow Tama to recreate its patent anew.

The Court analyzed whether the term necessitates the use of a Raschel device. The Court concludes that the specifications cannot be read to limit the '551 patent to use only on Raschel machines.

The Court reviewed the '551 patent to determine whether Tama acted as its own lexicographer, but there is no clear or

explicit definition in the specifications to redefined "knitted with" to include all forms of connection.

The Court adopts the following definitions. "Knitted with" means "the connection of the longitudinal polyolefin ribbons with lateral polyolefin ribbons by interlocking the lateral polyolefin ribbons with the longitudinal polyolefin ribbons in an interlooped configuration." "Interlooped" means a "lateral ribbon forms a loop that is interlocked with a loop formed by a longitudinal ribbon."

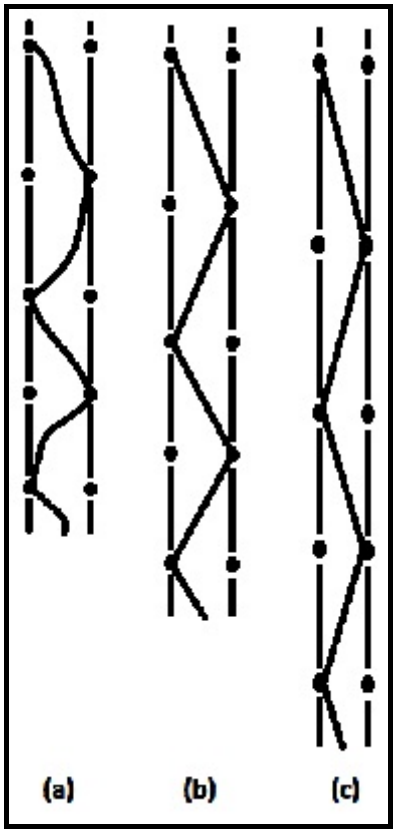
D. **"Reduced Lateral Shrinkage"** (Claims 1, 13, 24, and 29)

Tama's Proposed Construction	Pritchett's Proposed Construction

Subject netting has a reduced lateral shrinkage (% elongation v. % shrinkage) where it exhibits less lateral shrinkage than a relative netting (a) produced with an actual ribbon length equal to the calculated ribbon length (with respect to claims 1, 24, and 29) or (b) produced without said modified ribbon (with respect to claim 13), when the subject netting and relative netting are longitudinally stretched up to 100% of their original lengths. Any other differences between the subject netting and the relative netting that impact lateral shrinkage characteristics are minimized. "Actual ribbon length" is a measured length for a lateral (shuss) ribbon in a knitted netting of a triangle pattern, and is defined as "the actual shuss length" (ASL) in the definition of a "calculated shuss length" in the '551 Patent, which is defined at column 3, lines 52-57.	The netting always has a lateral shrinkage less than the lateral shrinkage of netting produced with an actual ribbon length equal to the calculated ribbon length when both nettings are longitudinally stretched from above 3% to 100% of their original length, provided that the two comparative nettings are otherwise identical, including the same longitudinal and lateral ribbons, polyolefin material, configuration, sizing and method of manufacture.

The Pritchett defendants have provided a demonstration of lateral shrinkage in their brief. Below is a graph depicting the invention in three stages as it is stretched longitudinally (elongated). In stage A, there is no elongation. In stage B, elongation of the invention stretches the longitudinal distance and shrinks the lateral distance. In stage C, the continued elongation of the invention incrementally stretches the longitudinal distance and shrinks the lateral distance.

Longitudinal stretching of nets causes lateral shrinkage. *See* Filing No. 272, at 16.



The measurement of lateral shrinkage is another characteristic of the '551 patent. Elongated ribbon measurements are calculated to compare lateral shrinkage of the modified ribbon compared to netting produced without a modified ribbon. Filing No. 273-1, at 11.

Two issues arise from this term. First, the parties contest whether the modified shuss netting and the non-modified

shuss netting must be identical or comparable. Second, the parties contest the meaning of "elongation up to 100%."

1. Netting Differences Minimized v. Identical Netting

The claims and the specifications do not require identical netting for comparing the nettings. The Pritchett defendants argue Tama disclaimed Reduced Distance Netting and agreed to edit its claims in order to receive its patent.

The defendants again try to infer a disclaimer without clear evidence of such disclaimer. Tama filed a response to the PTO's rejection of the Parent application. Filing No. 273-7, at 178. Tama said it agreed with the PTO examiner to would amend claims 9 and 31 to include the phrase "reduced lateral shrinkage relative to netting produced without a modified ribbon upon elongation up to 100%", or something "very similar." Substantively, this phrase is in the '551 patent. Tama made the amendment in the '551 patent. The PTO found that amendment patentable. The defendants' evidence is insufficient for the Court to modify the plain, ordinary meaning of these claims.

2. Up to 100% Elongation

The Court finds this term shall have its plain, ordinary meaning. The term does not include 100% elongation. Therefore, the Court adopts the plaintiff's construction of these terms.

E. **"Each of Said Triangles Having a Base Dimension and a Height Dimension"** (Claim 29)

Tama's Proposed Construction	Pritchett's Proposed Construction
"Said triangles" means "a pattern of triangles between adjacent longitudinal ribbons." The base dimension of a triangle of the netting is a measured length in the netting and is part of the definition of "calculated shuss length" in the '551 Patent at column 3, lines 41-47, and is shown as "A" in Figure 3c. The height dimension of a triangle is a measured length in the netting and is part of the definition of "calculated shuss length" in the '551 Patent at column 3, lines 36-40, and is shown as "H" in Figure 3c.	"[T]hese terms do not require construction, but rather are consistent with the base and height of the Raschel triangle described [in the defendant's proposed construction of] the term 'calculated ribbon length'." Filing No. 272, at 50.

The parties' arguments are contingent upon the Court's construction of "calculated ribbon length." Because the Court adopted Tama's construction of calculated ribbon length, the Court adopts Tama's construction of this term.

F. **"Height Dimension Defining a Distance Between Said Adjacent Longitudinal Ribbons"** (Claim 29)

Tama's Proposed Construction	Pritchett's Proposed Construction
A measured length in the netting and is part of the definition of "calculated shuss length" in the '551 Patent at column 3, lines 36-40, and is shown as "H" in Figure 3c.	The distance, at the time of the manufacture of the netting, between longitudinal ribbons, which is spacing of the adjacent knitting needles on the Raschel knitting machine that knitted them into the netting.

The plain language of the claim and the specifications support the plaintiff's proposed construction. *See* Filing No. 269, at 32-33. The defendants seek to introduce additional concepts from the specifications, including "the Raschel Triangle," into the construction of this claim. Filing No. 272, at 44; Filing No. 281, at 25; Filing No 273-1, at 11. The '551 patent's claims cannot be reworded because of the specifications. *Innova*, 381 F.3d at 1117 (quoting *White v. Dunbar*, 119 U.S. 47, 51-52 (1886)). Tama and the PTO were aware of the defendants' method of calculating measurements directly from a Raschel machine's needle settings at the time the patent was issued; however, the patent did not include the defendants' method and clearly requires a different method.

Also, the Court does not adopt the defendants' purported disclaimers. Therefore, the Court will not adopt the defendants' construction which necessitates the use of a Raschel

machine. Because of the language in the specifications and claims, the Court adopts the plaintiff's definition of this term.

G. **"Calculating Ribbon Length which is Based on Said Height Dimension"** (Claim 29)

Tama's Proposed Construction	Pritchett's Proposed Construction
The height dimension of a triangle in the netting means a measured length in the netting and is part of the definition of "calculated shuss length" in the '551 Patent at column 3, lines 36-40, and is shown as "H" in Figure 3c.	"[T]he proper construction of the term "calculated ribbon length' discussed above, should also apply to its use in claim 29." Filing No. 281, at 25.

The parties' arguments are contingent upon the Court's construction of "calculated ribbon length." Because the Court adopted Tama's construction of calculated ribbon length, the Court adopts Tama's construction of this term.

IT IS ORDERED:

The Court adopts the following claim constructions:

A. **"Longitudinal Polyolefin Ribbons"** (Claims 1, 13, 24, and 29)

Ribbons of polyolefin that run in the lengthwise direction in a knitted netting. Also, "Franze" ribbons.

B. **"Calculated Ribbon Length"** (Claims 1, 13, 24, and 29)

A lateral (shuss) ribbon in a knitted netting in the context of a triangle pattern wherein calculated ribbon length is defined as the "calculated shuss length" in the '551 Patent at column 3, lines 27-64 and in Figure 3c.

C. **"Knitted with" terms** (Claims 1, 13, 24, and 29)

"Knitted with" means "the connection of the longitudinal polyolefin ribbons with lateral polyolefin ribbons by interlocking the lateral polyolefin ribbons with the longitudinal polyolefin ribbons in an interlooped configuration." "Interlooped" means a "lateral ribbon forms a loop that is interlocked with a loop formed by a longitudinal ribbon."

D. **"Reduced Lateral Shrinkage"** (Claims 1, 13, 24, and 29)

Subject netting has a reduced lateral shrinkage (% elongation v. % shrinkage) where it exhibits less lateral shrinkage than a relative netting (a) produced with an actual ribbon length equal to the calculated ribbon length (with respect to claims 1, 24, and 29) or (b) produced without said modified ribbon (with respect to claim 13), when the subject netting and relative netting are longitudinally stretched up to 100% of their original lengths. Any other differences between the subject netting and the relative netting that impact lateral shrinkage characteristics are minimized. "Actual ribbon length" is a measured length for a lateral (shuss) ribbon in a knitted netting of a triangle pattern, and is defined as "the actual shuss length" (ASL) in the definition of a "calculated shuss length" in the '551 Patent, which is defined at column 3, lines 52-57.

E. **"Each of Said Triangles Having a Base Dimension and a Height Dimension"** (Claim 29)

"Said triangles" means "a pattern of triangles between adjacent longitudinal ribbons." The base dimension of a triangle of the netting is a measured length in the netting and is part of the definition of "calculated shuss length" in the '551 Patent at column 3, lines 41-47, and is shown as "A" in Figure 3c. The height dimension of a triangle is a measured length in the netting and is part of the definition of "calculated shuss length" in the '551 Patent at column 3, lines 36-40, and is shown as "H" in Figure 3c.

F. **"Height Dimension Defining a Distance Between Said Adjacent Longitudinal Ribbons"** (Claim 29)

A measured length in the netting and is part of the definition of "calculated shuss length" in the '551 Patent at column 3, lines 36-40, and is shown as "H" in Figure 3c.

G. **"Calculating Ribbon Length which is Based on Said Height Dimension"** (Claim 29)

The height dimension of a triangle in the netting means a measured length in the netting and is part of the definition of "calculated shuss length" in the '551 Patent at column 3, lines 36-40, and is shown as "H" in Figure 3c.

DATED this 11th day of June, 2014.

BY THE COURT:

/s/ Lyle E. Strom

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LYLE E. STROM, Senior Judge
United States District Court