# UNITED STATES DISTRICT COURT FOR THE DISTRICT OF VERMONT

MADGRIP HOLDINGS, LLC,	)
Plaintiff,	)
V.	) Case No. 16-cv-272
WEST CHESTER HOLDINGS, INC.,	)
Defendant.	) )

## OPINION AND ORDER

Plaintiff MadGrip Holdings, LLC ("MadGrip") brings this action claiming that Defendant West Chester Holdings, Inc. ("West Chester") has infringed its patent relating to the manufacture of utility gloves. MadGrip's patent describes the use of injection molding technology to provide cushioning on the palm and other portions of a utility glove. West Chester denies that its rival product infringes the MadGrip patent, and has filed counterclaims asserting that the patent is invalid and unenforceable.

Now before the Court is the matter of claim construction. The parties have conferred and resolved most claim construction issues, though a few disagreements remain. West Chester contends that there are three items in dispute: (1) the significance of the preamble to Claim 1, (2) the term "edges" in Claim 1, and (3) the term "saddle" in Claim 6. MadGrip submits that "edges" is the only term requiring construction. The Court held a non-testimonial claim construction hearing on June 20, 2017, after which the parties submitted supplemental briefing.

# Factual Background

MadGrip is a glove company located in Essex Junction,

Vermont. In 2006 or 2007, David Gellis, one of the principals of

MadGrip, allegedly devised a process for manufacturing utility

gloves using injection molding technology. MadGrip uses this

technology to produce a glove with a rubberized "concave palm,"

"pre-curved finger construction," and a "breathable knit"

backside. ECF No. 1 at 5. The injection molded glove is

"contoured with the natural contours of the wearer's hand to

allow for maximum motion while still providing cushion to the

wearer's palm." Id. at 5.

On July 16, 2007, Mr. Gellis filed a provisional patent application describing the injection-molding manufacturing technique. After several iterations of the application, discussed in more detail below, the United States Patent and Trademark Office ("USPTO") granted United States Patent No. 9,346,202 (the "'202 Patent") on May 24, 2016. MadGrip is the assignee of the '202 Patent, which is entitled "Utility Glove."

The '202 Patent contains 25 claims. Claims 1-7, 9-10, and 13 are asserted in this action. Claim 1, the only independent claim being asserted, states:

1. A method of manufacturing a utility glove having a thumb and four fingers, said glove comprising a three dimensional molded portion, the molded portion comprising an elastomeric material bonded to a fabric material in a three dimensional configuration substantially conforming to three dimensional contours of at least a portion of a hand exclusive of any

variations in thickness or features on the surface of the molded portion, comprising the steps of:

- a. placing a glove blank comprising a fabric material over a first mold part in the form of at least a portion of a hand;
- b. bringing at least a second mold part into molding engagement with the first mold part to create a cavity with the glove blank on the first mold part; and
- c. injecting with an elastomeric material into the cavity to form the molded portion, wherein the elastomeric material is injected on the side of the fabric material opposite the first mold part, said molded portion comprising greater than 50% of the circumference of each of the fingers along the length of each finger while leaving an area of fabric without elastomeric material on each finger wherein the molded portion comprises a palm having a middle and edges, the palm edges comprising a heel, a front corresponding to knuckles of the fingers, a thumb side and an outer side, wherein the middle of the palm is set in from the heel, the front, the thumb side and the outer side of the palm to form a concave shape.

## ECF No. 1-1 at 16.

Defendant West Chester sells a line of gloves known as Sumo Grip. Sumo Grip advertising uses the term "injection grip technology," and references the glove's "injection-molded grip." ECF No. 1 at 10. MadGrip claims that the Sumo Grip glove infringes elements specific to Claim 1 of the '202 Patent, including that "the molded portion of the Sumo Grip glove is greater than 50% of the circumference of each finger, and it includes a palm with a middle and edges, a thumb side and an outer side, and the middle of the palm is set in from the edges of the palm to form a concave shape." Id. at 11. MadGrip

alleges, upon information and belief, that the Sumo Grip glove infringes other Claims within the '202 Patent as well. *Id.* ("the Sumo Glove infringes at least Claims 1-5, 7-10 and 13 of the '202 Patent").

West Chester argues that its product is not infringing, and that MadGrip is trying to eliminate some of the limitations set forth in the '202 Patent in order to secure a broader monopoly in the marketplace.

# **Prosecution History**

At claim construction, the prosecution history can be a relevant consideration. See Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005). Here, that history began on July 16, 2007, when MadGrip filed provisional patent application No. 60/950,028 (the "'028 Provisional"). Among other things, the '028 Provisional described "[a] three dimensional molded palm having a thumb portion and at least one finger portion." ECF No. 51-4 at 16. The provisional application also stated that the "palm gripping portion covers the entire palm side of all fingers." Id. at 14.

On July 16, 2008, MadGrip submitted U.S. Patent Application 12/218,562 (the "'562 Application"). The Patent Examiner for the application was Katherine Moran. Claims 1 through 16 of the '562 Application were for a glove with molded portions. Claims 17 through 20 were for methods of injection molding a glove.

Examiner Moran rejected the claims, in part based upon a patent to "Howard," which reportedly shows a utility glove with a molded palm portion comprised of thickened areas that are raised in relation to other areas of the palm. Examiner Moran commented that one of the figures in Howard "shows the palm region and it appears that the pad tapers at its outer edges towards the finger and towards the wrist." ECF No. 51-5 at 61. West Chester highlights this first reference to the term "edges" as significant for claim construction.

On October 12, 2009, MadGrip filed U.S. Patent Application No. 12/577,273 (the "'273 Application"). Katherine Moran was again the examiner. The '273 Application specified a "[p]recurved concave palm, where the middle of the palm portion is set in from the edges of the palm to create an at least partially cupped shape." The USPTO again rejected the claim, citing a patent to "Wiley." The examiner found that Wiley had a "molded palm portion [] formed in a pre-curved configuration where the middle of the palm is set in from the edges to form a concave shape." ECF No. 51-7 at 175. The examiner also again cited Howard as disclosing a molded palm portion set in from the edges to form concavity.

MadGrip contested the examiner's conclusion that Wiley and Howard barred its claim, in part because the molded portion in those patents was not completely concave from the middle to the

edges. On March 5, 2012, the patent examiner again rejected the claim, explaining that certain illustrations (Figures) in the Howard patent show a palm with "an edge at the outermost thumb palm portion," and "the palm portion extending from the index finger into a palm area. This portion has a middle set in from the edges." Id. at 224, 227. The examiner further cited Wiley and its specification discussing "a concave outer face.

Therefore, at least a portion of a middle molded portion is set in from the edges of the molded portion." Id. at 226.

The claims in the '273 Application were rejected on June 4, 2012, and again on November 1, 2012 after MadGrip filed an Amendment. The latter rejection was not based on either the Howard or the Wiley patents. MadGrip appealed to the Patent Trial and Appeal Board. In the course of the appeal, MadGrip stated that "the present claimed invention is not merely defined as having a palm that is pre-curved . . . Instead, the present invention is defined as having a palm with a middle and edges [where] the middle of the palm is set in from the edges of the palm to form a concave shape . . . ." Id. at 418 (internal quotation marks and citation omitted). A patent issued from the '273 Application on November 2, 2016 (after issuance of the '202 Patent).

On October 11, 2010, MadGrip filed an international application that was a continuation-in-part of the '273

Application. Claim 1 of the foreign patent was rejected due to a patent to "Jaeger," which reportedly disclosed "a utility glove..., the palm side comprising a three dimensional molded portion... wherein the molded portion is formed in a pre-curved configuration with the middle of the palm set in from the edges of the palm to form a concave shape within the palm." ECF No. 37-2 at 470.

On April 5, 2012, MadGrip began prosecution of U.S. Patent Application No. 13/500,483 (the "'483 Application"). Katherine Moran was the initial examiner, but Matthew Daniels replaced her in 2015. Claim 3 of the '483 Application stated that the "molded portion includes a palm portion with the middle set in from the edges of the palm to form a concave shape within the palm." Id. at 314-15. Claim 29 of the application defined "edges" as "a heel, a front corresponding to knuckles of the fingers, a thumb side and an outer side." Id. at 320. MadGrip stated in the "remarks" section that "[f]or Claim 29, the amendment more clearly defines the concave shape of the palm, with the middle of the palm set in from the edges of the palm to form a cupped shape." Id. at 321.

In 2015, the examiner rejected all claims in the '483

Application, based in part upon a prior MadGrip application (the '562 Application) and other patents showing gloves with various thicknesses of elastomeric material. West Chester notes that not

all of that prior art cited by the examiner involved injection molding.

On November 17, 2015, MadGrip's counsel submitted amended claims to the USPTO and requested further examination. Claim 15, as amended, stated

- 15. (currently amended) A method of manufacturing an injection-molded utility glove having a thumb and four fingers, said glove comprising a three dimensional molded portion, the molded portion comprising an elastomeric material bonded to a fabric material in a three dimensional configuration substantially conforming to three dimensional contours of at least a portion of a hand exclusive of any variations in thickness or feature on the surface of the molded portion: comprising the steps of:
  - a. placing a glove blank comprising a fabric material over a first mold part in the form of at least a portion of a hand;
  - b. bringing at least a second mold part into molding engagement with the first mold part to create a cavity with the glove blank on the first mold part; and
  - c. injecting with an elastomeric material into the cavity to form the molded portion, wherein the elastomeric material is injected on the side of the fabric material opposite the first mold part, said molded portion comprising greater than 50% of the circumference of each of the fingers along the length of each finger while leaving an area of fabric without elastomeric material on each finger.
- Id. at 91. Claim 33, which was dependent on Claim 15, stated:
  - 33. (new) The method of Claim 15 wherein the molded portion comprises a palm having a middle and edges, the edges comprising a heel, a front corresponding to knuckles of the fingers, a thumb side and an outer side, wherein the middle of the palm is set in from the heel, the front, the thumb side and the outer side of the palm to form a concave shape.
- Id. at 93. MadGrip notes that Claim 33, being a dependent claim,

included all of limitations of the method recited in Claim 15, but added that the molded portion included a concave palm.

On December 9, 2015, the patent examiner issued an office action stating that he believed Claim 15 was obvious based on certain prior art; specifically, two patents that had been granted to "Edwards" and "Koliwer." The Edwards patent showed a rubber-coated glove, and the Koliwer patent showed injection molding in clothing such as boots. Nonetheless, the examiner concluded that two features of the amended claims would be allowable if asserted as an independent claim. Specifically, the examiner found that Edwards showed a rubber coating extending "360 degrees about the main body portion" of the glove, and noted in a parenthetical that "(a molded palm with edges would make the molded portion terminate on the palm)." Id. at 66. The examiner further stated: "Additionally, while gloves where the middle of the palm is formed in a concave shape may be known, these configurations are not formed by an injection molding process. The additional feature of engaging a first mold part with a second mold part to form a concave shape in the middle of the palm are not obvious over the prior art even if gloves formed by a different method having the same configuration are known." Id. at 66-67.

On December 22, 2015, MadGrip submitted an amendment that essentially combined Claim 33 and Claim 15 into a new Claim 1.

That claim, as cited above, described the manufacturing process, as well as the molded portion which "comprises a palm having a middle and edges, the palm edges comprising a heel, a front corresponding to knuckles of the fingers, a thumb side and an outer side, where in the middle of the palm is set in from the heel, the front, the thumb side and the outer side of the palm to form a concave shape." On May 24, 2016, the USPTO granted MadGrip a patent covering its utility glove manufacturing methods in the form of the '202 Patent.

## Discussion

# I. Analytical Framework

Analysis in a patent infringement case involves two steps.

See Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d

801, 807, 812 (Fed. Cir. 2002); Vitronics Corp. v. Conceptronic,

Inc., 90 F.3d 1576, 1581-82 (Fed. Cir. 1996). The first step is

to determine the scope and meaning of the patent. See Markman v.

Westview Instruments, Inc., 517 U.S. 370, 388-89 (1996). When

undertaking this determination, "[i]t is a 'bedrock principle' of

patent law that 'the claims of a patent define the invention to

which the patentee is entitled the right to exclude.'" Phillips,

415 F.3d at 1312 (quoting Innova/Pure Water, Inc. v. Safari Water

Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)).

"[T]he words of a claim are generally given their ordinary and customary meaning. . . . [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." Phillips, 415 F.3d at 1312-13. "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 judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." Id. at 1314.

The Supreme Court has held that claim construction involves mixed questions of law and fact, with courts construing claims in light of the intrinsic record of the patent as a matter of law, and if necessary, making factual findings with respect to the extrinsic record. Teva Pharms. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 840-41 (2015) (vacating Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp., 744 F.3d 1272 (Fed. Cir. 2014)). Intrinsic evidence consists of the patent claims, the specification, and the patent's prosecution history. Phillips, 415 F.3d at 1314; IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1433 (Fed. Cir. 2000).

Patent claims are the numbered paragraphs "particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112. A patent specification is a written description of the invention, and is

one of the documents submitted to the USPTO as part of the application. Id. § 111(2). The specification concludes with the set of claims. Id. § 112. While the claims themselves are obviously important, Phillips, 415 F.3d at 1312, the patent specification "is 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." Id. at 1315 (quoting Vitronics, 90 F.3d at 1582)). Phillips explained that the value of the specification is due to "the statutory directive that the inventor provide a 'full' and 'exact' description of the claimed invention." Id. at 1316. The specification therefore "informs the proper construction of the claims." Id.

The prosecution history consists of "the complete record of the proceedings before the Patent Office and includes the prior art cited during examination of the patent." Id. at 1317. The prosecution history may involve some ambiguity, since it represents ongoing negotiations between the patent applicant and the USPTO. Id.; Grober v. Mako Products, Inc., 686 F.3d 1335, 1341-43 (Fed. Cir. 2012). Consequently, the prosecution history "often lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips, 415 F.3d at 1317.

If, after reviewing the intrinsic evidence, a court still

finds a claim term ambiguous, it can look to extrinsic evidence which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). Such external evidence is "less significant than the intrinsic record in determining the 'legally operative meaning of claim language.'" C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004) (quoting Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n, 366 F.3d 1311, 1318 (Fed. Cir. 2004)).

In the second step of the analysis, the patent claims as construed by the court are compared to the accused device or method to determine alleged patent infringement. See Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 29 (1997). Those determinations involve questions of fact, and are not at issue during claim construction. Bai v. L & L Wings, Inc., 160 F.3d 1350, 1353 (Fed. Cir. 1998) (citation omitted).

# B. A Person of Ordinary Skill in the Art

According to MadGrip's expert, Dr. Paul Koch, a person of ordinary skill in the art relevant to this case is a person who has, among other things, obtained a bachelor's degree in engineering or material science, or equivalent experience, and

accrued at least four years of practical experience in relevant injection molding techniques. The relevant art in this case is "utility gloves having elastomeric reinforcements for improved protection of the wearers' hands." ECF No. 39 at 7 (Koch Decl. at ¶ 20) (citing '202 Patent at 1:16-17).

## II. Disputed Claims

#### A. The Preamble

West Chester first argues that the preamble to Claim 1 in the '202 Patent is limiting because it offers a substantive definition. A preamble is an introductory statement at the beginning of a claim, and is not generally viewed as limiting. Bicon, Inc. v. Straumann Co., 441 F.3d 945, 952 (Fed. Cir. 2006) ("Preamble language that merely states the purpose or intended use of an invention is generally not treated as limiting the scope of the claim."). A preamble will only be deemed limiting where there is "clear reliance on the preamble in the prosecution history, or in situations where it is necessary to provide antecedent basis for the body of the claim." Symantec Corp. v. Computer Assoc. Int'l, Inc., 522 F.3d 1279, 1288 (Fed. Cir. 2008). "Whether a preamble stating the purpose and context of the invention constitutes a limitation of the claimed process is determined on the facts of each case in light of the overall form of the claim, and the invention as described in the specification and illuminated in the prosecution history." Applied Materials,

Inc. v. Advanced Semiconductor Materials Am., Inc., 98 F.3d 1563, 1572-73 (Fed. Cir. 1996).

The preamble to Claim 1 states as follows:

A method of manufacturing a utility glove having a thumb and four fingers, said glove comprising a three dimensional molded portion, the molded portion comprising an elastomeric material bonded to a fabric material in a three dimensional configuration substantially conforming to three dimensional contours of at least a portion of a hand exclusive of any variations in thickness or feature on the surface of the molded portion, comprising the steps of:

. . . .

ECF No. 37-1 at 16. The dispute raised by West Chester centers on the description of "a three dimensional molded portion."

Claim 1 subsequently refers to "the molded portion" in subsection (c), and West Chester contends that use of the word "the" in that subsection suggests that the term "molded portion" was previously-defined. West Chester contends that because the preamble offers a description and goes beyond merely stating "a purpose or intended use for the invention," Rowe v. Dror, 112

F.3d 473, 478 (Fed. Cir. 1997), that description is antecedent and "patentably significant." STX, LLC v. Brine, Inc., 211 F.3d 588, 591 (Fed. Cir. 2000).1

West Chester argues that in addition to "the molded portion," other phrases in the '202 Patent are limiting because they use the article "the" before terms that are first mentioned in the preamble, such as "the fingers" and "the thumb." Unlike "molded portion," however, the terms "fingers" and "thumb" are not described in any detail in the preamble, and are "readily apparent even to lay judges." Phillips, 415 F.3d at 1314.

Terms in a preamble may provide an antecedent basis when "when the limitations in the body of the claim rely upon" the preamble language. Bicon, Inc., 441 F.3d at 952 (quoting Eaton Corp. v. Rockwell Int'l Corp, 323 F.3d 1332, 1339 (Fed. Cir. 2003)). For example, in Eaton the court noted that the claim used the phrase "during the gear ratio shift," while the preamble described "a gear ratio change" as a "sequence of disengaging a first positive clutch and then engaging a second positive clutch." 323 F.3d at 1339 (emphasis added). The Federal Circuit determined that because the claim referred to "the particular sequence defined only by the preamble as the gear ratio shift," the preamble was limiting. Id. at 1340.

MadGrip submits that while its patent is for a manufacturing process, the preamble describes the final product: a utility glove where part of the glove is molded into the fabric so as to conform to the user's hand. The manufacturing process itself is spelled out in Claim 1 subsections (a), (b), and (c), which describe placing a glove blank over a mold, bringing a second mold part "into molding engagement with the first mold part to create a cavity," and injecting an elastomeric material into the cavity to form "the molded portion." Further, subsection (c) provides a detailed description of the molded portion. No part of that description relies on the preamble.

With respect to the prosecution history, West Chester notes

that in November 2015, prior to the patent's approval, the applicant changed the language in subsection (c) from "a molded portion" to "the molded portion." Citing Eaton, West Chester argues that this change made the preamble description antecedent. This case is different from Eaton, however, as the preamble in Eaton described a process that was an integral part of the invention and was later referred to in the body of the patent simply as "the gear ratio shift." Here, the preamble offers a general description of the molded portion of the glove, with no necessary information about the manufacturing process and little detail about any potential limitations.

"In general, a preamble limits the claimed invention if it recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim." Eaton, 323 F.3d at 1339. Here, the preamble describes an end product. The description of the manufacturing process in the body of Claim 1 spells out the steps to be taken to achieve that end product, and deletion of the preamble would not impact those steps. See Catalina Mktg. Int'l, Inc., 289 F.3d at 809 ("a preamble generally is not limiting when the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention"). Consequently, the preamble to Claim 1 is not limiting for purposes of claim construction.

B. "the molded portion comprises a palm having a middle and edges, the palm edges comprising a heel, a front corresponding to knuckles of the fingers, a thumb side and an outer side"

This description of the palm area of the molded portion, and in particular the term "edges," is a source of significant disagreement in this case. The language appears in subsection (c) of Claim 1, which reads in relevant part:

. . . the molded portion comprises a palm having a middle and edges, the palm edges comprising a heel, a front corresponding to knuckles of the fingers, a thumb side and an outer side, wherein the middle of the palm is set in from the heel, the front, the thumb side and the outer side of the palm to form a concave shape.

ECF No. 37-1 at 16. MadGrip argues for this subsection to be construed as:

the molded portion includes a palm area having a middle and defined by the heel of the hand, the palm side of the knuckles of the fingers, the thumb side of the hand, and the outer side of the hand

West Chester seeks a more limiting construction, proposed as:

the molded portion includes a palm portion that has a middle and four edges at which the molded portion terminates on the palm side of the glove, the palm edges including a heel, a front that aligns with a knuckle of each finger of the user, a thumb side and an outer side

West Chester's proposal requires a palm with four edges where the molded portion terminates and gives way to fabric.

MadGrip's proposed construction submits that "the molding . . .

does not terminate at the palm, but rather extends partially over the fingers and back of the hand." ECF No. 38 at 11.

Consequently, MadGrip's proposal does not retain the word "edges," as it contends that the intent of Claim 1(c) was merely to "define a 'palm' with certain boundaries to serve as a reference plane for the later described 'concave shape.' Without this 'palm' reference, it would not be clear where on the glove the concavity is placed." Id. at 12.

According to MadGrip, West Chester is arguing for termination at the palm edges because the allegedly-infringing Sumo Grip glove "does not terminate at the palm, but rather extends partially over the fingers and back of the hand." ECF No. 38 at 11. Therefore, if the Court accepts West Chester's construction of the term "edges," with explicit termination on the palm, there can be no infringement. Both parties claim support from intrinsic evidence, with MadGrip relying primarily upon the claims and specification, and West Chester citing heavily from the prosecution history.

## 1. The Claim Language

A construction that "stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction."

Phillips, 415 F.3d at 1316 (quoting Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

Here, the plain language in the '202 Patent Claims favors MadGrip's proposed construction.

Claim 1 refers to "the molded portion," suggesting a single body of elastomeric material as opposed to individual molded portions with the palm being isolated from other padded sections of the glove. That elastomeric material is injected at a single point "on the side of the fabric material opposite the first mold part," again suggesting a unified "molded portion."

The dependent claims further support MadGrip's reading.<sup>2</sup>
Claim 11 states that the "molded portion is formed to entirely surround one or more openings comprising an area of fabric without elastomeric material." ECF No. 37-1 at 16. Claim 6 states that the "molded portion includes a saddle between the thumb and a first finger that extends continuously from a palm side to a back side of the glove." Id. Claim 7 describes the "the molded portion comprising greater than 50% of the circumference of the thumb, each finger and the main body portion of the glove." Id.

MadGrip calls attention to the term "comprises," which is an inclusive rather than limiting term. Claim 1 states that "the molded portion comprises a palm having a middle and edges, . . ."

The parties have stipulated that the term "comprises" means "includes," ECF No. 36 at 1, and the Federal Circuit has

The Federal Circuit has held that "[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term." Phillips, 415 F.3d at 1314.

recognized that "the term 'comprising' raises a presumption that the list of elements is nonexclusive." Dippin' Dots, Inc. v.

Mosey, 476 F.3d 1337, 1343 (Fed. Cir. 2007). Consequently, Claim 1 must be construed as stating that "the molded portion includes, but is not limited to, a palm having a middle and edges." Such a construction allows for "the molded portion" to extend beyond the palm, including into "greater than 50% of the circumference of each of the fingers" as described in Claim 1.

Patent terminates at the palm, and may extend to the back of the glove only from areas that are separate from the four edges of the palm (for example, over the "saddle" that sits between the thumb and forefinger). This assertion is inconsistent with the Claim language. Nothing in Claim 1 suggests that the description of the palm area as defined by a "middle and edges" renders those "edges" a point of termination for the molding. If the Court were to accept West Chester's construction, it would largely be equating "the palm" with "the molded portion," and Claim 1 does not support such a reading. Moreover, accepting West Chester's proposed construction would require termination on "a thumb side," which is inconsistent with the description in Claim 6 of a single, molded portion extending to the back side of the glove.

Not surprisingly, West Chester notes that MadGrip's proposed construction does not include the word "edges." MadGrip's

defense is that the terms "edges" and "middle" are useful only in defining the concavity of the palm area. Claim 1 recites that the middle is "set in," and the term "edges" helps the reader determine where that middle is "set in" from.

"[C]laims are interpreted with an eye toward giving effect to all terms in the claim." Bicon, 441 F.3d at 950. The question here is whether MadGrip's proposal to construe "a palm having a middle and edges, the palm edges comprising a heel" as "a palm area having a middle and defined by the heel" fails to give effect to the term "edges." The Court finds that it does not. MadGrip's proposed construction of the term "edges" is consistent with the language of the Claim, which describes a single molded portion that includes a concave palm area, that area being defined by the heel of the hand, the thumb side, the outer side, and the knuckles of the fingers. Under MadGrip's construction, the effect of the term "edges" has not been lost, and has instead been construed in a manner consistent with other language in the Claims.

#### 2. The Specification

The specification similarly indicates that the molded portion extends beyond the palm. The specification explains that "the molded pre-curved palm portion . . . continues to the fingers to form an overall cupped shape including the fingers, again to minimize bunching when the hand is closed." '202 Patent

at 7:40-43. The specification goes on to describe Figure 9, which illustrates "the first molded areas 20, shown as about and within the palm, between the fingertips and joint between the fingers and the palm, around the back of the glove and in the flex grooves 8, [which] is formed of an elastomeric material that is from about .4 to about 1.0 mm." Id. at 7:47-50. Both the specification and Figure 9 indicate continuity of the elastomeric material extending from the palm to other regions of the glove, including the fingers.

West Chester discounts Figure 9 and relies instead upon Figure 4 which, it claims, shows four "edges" of the molded portion. Those "edges" (on a left-handed glove) would consist of a right side edge ending just below the pinkie finger, a bottom edge that extends roughly half way across the bottom of the palm with a curve toward the middle of the palm, an edge on the thumb side, and upper edges that extend into the knuckles on each of the four fingers. ECF No. 37 at 21 (displaying proposed edges on Figure 4).

For the Court to accept Figure 4 as persuasive, it must determine whether a person of ordinary skill in the art would view it as depicting "a palm area having a middle and defined by the heel of the hand, the palm side of the knuckles of the fingers, the thumb side of the hand, and the outer side of the hand." Among other things, Figure 4 shows "edges" defined by

only part of the heel of the hand, and a very small portion of the outer side of the hand. Figure 4 also fails to show a palm with a "middle." In fact, it excludes the middle almost entirely. Finally, where the specification describes the concave palm, there is no reference to Figure 4:

In the embodiments shown in **FIGS. 5-10**, molded portion 4 preferably covers at least, and preferably greater than, 50% of the circumference of the fingers including the entire palm side and the majority of the sides of the fingers. The palm portion 4' of the embodiment shown in **FIGS. 9 and 10** is preferably pre-curved in a concave configuration to minimize bunching when the wearer's hand closes.

'202 Patent at 6:51-57 (emphasis added).

The specification does speak of multiple molded areas, while the claim language identifies a single molded portion extending from the palm into the fingers and around to the back side.

These are not inconsistent, as the focus in the disputed language is upon the "edges" as they relate to the palm area. The specification describes a "molded first areas 20" as being "about and within the palm, between the fingertips and joints between the fingers and palm, around the back of the glove . . . ."

Nothing in the specification suggests that palm itself is formed by an isolated piece of elastomeric material, or that there is a point of termination between the palm and the backside of the glove. Indeed, Figure 9 and the specification language suggest the contrary, and favor MadGrip's proposed construction.

## 3. The Prosecution History

To support its proposed construction, West Chester relies heavily on the prosecution history. In particular, it places considerable weight on the parenthetical statement by the examiner in the course of the '483 Application that "(a molded palm with edges would make the molded portion terminate on the palm)." MadGrip contends that the examiner's parenthetical statement was at best ambiguous, was at worst erroneous, and was not binding. MadGrip also cites the examiner's "additional" reason why the invention would not be obvious, and claims that it relied upon that statement when it pursued further prosecution efforts.

The prosecution history began with the '028 Provisional and its description of the molded palm as including the thumb and at least one finger. West Chester asks the Court to notice that at the next step, the '562 Application, there was no reference to either concavity or edges. The concept of an edge did arise during the patent examiner's discussion of prior art, specifically the Howard patent. According to the examiner, the Howard patent showed "one or more thickened areas that are raised in relation to adjacent areas of the palm portion." The examiner further noted that "the pad tapers at its outer edges toward the finger and towards the wrist." West Chester reads this statement as indicating that in Howard, the pad gets progressively thinner until the outer edge, at which point the glove becomes plain

fabric.

When the '273 Application was filed, MadGrip described a palm portion in a pre-curved configuration to create a concave shape. The Application included Figures 1-10. As noted above, MadGrip highlights Figure 9, which depicts the entire palm area and suggests continuity of the molded portion beyond the "edges" of the palm. West Chester prefers Figure 4 and its more limited "edges."

When the USPTO rejected claims in the '273 Application, the examiner cited the concave palm "set in from the edges" in Wiley. West Chester contends that representations in the Wiley patent show the edges as actual physical end points at the heel, thumb side, outer side, and tips of the fingers. The examiner also referenced a pre-curved palm in the Howard patent that was "set in from the edges to form a concave shape," and West Chester again submits that those "edges" represented a termination point. West Chester concedes, however, that the Howard and Wiley patents did not use the word "terminates" in reference to the respective edges. ECF No. 51 at 14.

When MadGrip amended Claim 29 in 2013, it remarked that the "middle of palm" was "set in from the edges of the palm to form a cupped shape." There was no limitation with respect to the molding terminating at such an "edge." Instead, as MadGrip contends, the term was used as a reference point for the middle

and the surrounding cupped shape.

MadGrip also compared the edges of the palm as described in the prosecution history to the edges of a human hand. After withdrawing Claim 29, MadGrip explained to the examiner that "the claim merely includes the well-known common terms used for edges of the palm. In this regard, there is little doubt that the human palm has edges bounded at the back of the heel of the palm, at the front by the knuckles of the fingers, at one side by a thumb side of the palm and at the other side by an outer side of the palm." ECF No. 37-2. MadGrip now argues that just as the skin on a human palm has no termination point, the description of a palm on a glove does not necessarily require a termination of materials, and is instead useful merely as a way to describe the palm area.

Nothing in this prosecution history definitively counters the Claims and specification that ultimately defined the '202 Patent. While West Chester invites the Court to consider the examiners' discussions of prior art, and to take note of certain "edges" as termination points, none of those cited prosecution communications lay to rest the claim construction questions now before the Court. Nor is it clear from the history that, prior to the '483 Application, a termination point (or lack thereof) at the "edges" was either considered or seen as significant by the examiner.

As Phillips explained, a prosecution history "often lacks the clarity of the specification and thus is less useful for claim construction purposes." 415 F.3d at 1317; see also Inverness Med. Switz. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1380-82 (Fed. Cir. 2002) (the ambiguity of the prosecution history made it less relevant to claim construction); Athletic Alternatives, Inc. v. Prince Mfg., Inc., 73 F.3d 1573, 1580 (Fed. Cir. 1996) (the ambiguity of the prosecution history made it "unhelpful as an interpretive resource" for claim construction). Such is the case here, as the history outlined by West Chester speaks of "edges" and concavity, but lends little to the question of whether, and to what extent, the molded portion in the '202 Patent extends from the palm area into other areas on a glove. The Court must therefore turn to West Chester's next argument, which relies in the examiner's parenthetical.

In 2015, the examiner stated that "(a molded palm with edges would make the molded portion terminate on the palm)." West Chester submits that this statement resulted in a limitation in the '202 Patent, in part because MadGrip amended its application in keeping with the examiner's comments. A review of the prosecution history, however, shows that the relevant amendment after the examiner's comment was the merger of Claims 33 and 15 into what would eventually become Claim 1. Claims 33 and 15 existed prior to the examiner's comments, and no new language was

added to the existing set of claims.

Nonetheless, West Chester argues that the patent examiner narrowed MadGrip's claim with specific limitations, and that MadGrip cannot now broaden the scope of its patent in light of his comments. For support, West Chester compares this case to Fantasy Sports Properties, Inc. v. Sportsline.com, Inc., 287 F.3d 1108 (2002). In Fantasy Sports, the patent examiner had rejected all but three of the applicant's claims related to a fantasy football computer game. Based upon the examiner's comments, and in particular the commentary about the "bonus points" feature of the game being limited to certain groups of players, the applicant rewrote the application and a patent was subsequently The assignee of the Fantasy Sports patent later tried to arque for a broad reading of the "bonus points" feature. Federal Circuit looked to the prosecution history for guidance, and concluded that by adhering to the examiner's comments, the applicant had "acquiesced in [the examiner's] rejections by canceling all claims that did not contain the 'bonus points' limitation at issue on appeal . . . . " Fantasy Sports, 287 F.3d at 1115.

Here, the examiner commented that the "molded portion" included "edges" that terminated on the palm. MadGrip points out that the examiner also gave another, alternate reason for allowing the patent. The examiner stated that "engaging a first

mold part with a second mold part to form a concave shape in the middle of the palm are not obvious over the prior art even if gloves formed by a different method having the same configuration are known." MadGrip submits that it only acquiesced to this observation, and that Fantasy Sports is therefore inapposite.

Fantasy Sports may not apply to this case for the reason set forth by MadGrip. Fantasy Sports also does not apply because the statement by the examiner in this case was neither clear nor binding. The parties dispute whether, in his commentary, the examiner was offering multiple reasons for allowance or a single reason. Moreover, it is unclear whether the examiner meant termination on the entire palm or just a portion of the palm. Indeed, the examiner's parenthetical statement scarcely supports West Chester's contention that the molded portion must terminate, and give way to fabric, at the four points identified on Figure 4.

Where an examiner's statement is "not entirely clear," that portion of the prosecution history is "not particularly helpful to either party's claim construction process." Netcraft Corp. v. eBay, Inc., 549 F.3d 1394, 1401-02 (Fed. Cir. 2008). Further, where there is a conflict between the specification and an examiner's commentary, "it is the patentee's words [in the specification] that define the claim." 3M Innovative Properties

Co. v. Tredegar Corp., 725 F.3d 1315, 1332 (Fed. Cir. 2013).<sup>3</sup>
Here, the examiner's statement—if intended to place a limitation on the molded portion—is inconsistent with the Claims and specification, and ambiguous at best with regard to the extent of any such termination. The Court therefore declines to adopt the examiner's statement as controlling.

In a related argument, West Chester contends that the doctrine of prosecution disclaimer bars MadGrip from discounting the examiner's parenthetical comment. Prosecution disclaimer may be considered when an applicant has narrowed a claim in order to receive patent approval. In that situation, it would be inequitable for the recipient of the patent to later argue for a broader interpretation. The doctrine of prosecution disclaimer therefore bars the patentee from enforcing a claim scope that was disavowed during patent prosecution. See Omega Engineering, Inc. v. Raytek Corp., 334 F.3d 1314, 1323-24 (Fed. Cir. 2003) ("The doctrine of prosecution disclaimer . . . preclude[s] patentees from recapturing through claim interpretation specific meanings

MadGrip contends that, to the extent West Chester is relying upon the reading of the patent by the examiner, the Court must view the patent not through the eyes of the examiner but rather from the perspective of a person of ordinary skill in the field. See Phillips, 415 F.3d at 1312 ("The inventor's words . . . must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology."). West Chester counters that an examiner is assumed to be a person of ordinary skill in the art. See In re Lee, 277 F.3d 1338, 1345 (Fed. Cir. 2002). In any event, at least with respect to a single examiner's statement, "claim construction is not decided based on isolated statements of one of skill in the art." 3M Innovative Properties Co., 725 F.3d at 1332.

disclaimed during prosecution . . . . ").

"When the prosecution history is used solely to support a conclusion of patentee disclaimer, the standard for justifying the conclusion is a high one." Avid Tech., Inc. v. Harmonic, Inc., 812 F.3d 1040, 1045 (Fed. Cir. 2016). Accordingly, in order to be subject to prosecution disclaimer, a patentee must make "a clear and unmistakable disavowal of scope during prosecution." Purdue Pharma L.P. v. Endo Pharms., Inc., 438 F.3d 1123, 1136 (Fed. Cir. 2006). There was no such disavowal in this case.

The prosecution history indicates that after the examiner offered his parenthetical comment about termination on the palm, MadGrip made amendments and resubmitted its application. Those amendments, however, did not in any way change the phrasing now at issue. The language existed in Claim 33 of the '483 Application, and was ultimately incorporated into Claim 1 verbatim.

West Chester argues that even if the language did not change, MadGrip moved forward with the benefit of the examiner's statement that the glove would not be obvious if "(a molded portion with edges would make the molded portion terminate on the palm)." Again, the examiner also set forth a second, "additional" reason for allowance, noting that while prior art showed gloves where the middle of the palm is concave, "those

configurations are not formed by an injection molding process."

MadGrip submits that it continued with its application based, in part, upon this second reason for allowance.

Given the examiner's multiple, though arguably related, reasons for allowance, MadGrip's actions thereafter did not clearly and unambiguously disclaim their proposal to produce a product with a molded portion that did not terminate at the palm. Where there has been no clear and unambiguous disavowal, the prosecution history will not limit the scope of a claim at claim construction. See Schwing GmbH v. Putzmeister

Aktiengesellschaft, 305 F.3d 1318, 1324-25 (Fed. Cir. 2002)

("[P]rosecution history . . . cannot be used to limit the scope of a claim unless the applicant took a position before the PTO that would lead a competitor to believe that the applicant had disavowed coverage of the relevant subject matter."). The Court therefore finds that West Chester's citations to the prosecution history, and in particular the examiner's parenthetical, do not undercut MadGrip's proposed construction.

#### 4. Conclusion as to "Edges"

"The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction."

Phillips, 415 F.3d at 1316. Here, the claim language, together with the specification, aligns most closely with MadGrip's

proposed construction with respect to the molded portion. The Court will therefore construe that language as MadGrip has proposed: "the molded portion includes a palm area having a middle and defined by the heel of the hand, the palm side of the knuckles of the fingers, the thumb side of the hand, and the outer side of the hand."

## C. "corresponding to knuckles of the fingers"

West Chester next urges the Court to construe the term "a front corresponding to knuckles of the fingers." That phrase is in the context of the patent's definition of the palm edges as "comprising a heel, a front corresponding to knuckles of the fingers, a thumb side and an outer side." West Chester calls for a broad reading such that the edges might correspond with any knuckle or combination of knuckles going up the fingers.

MadGrip responds that a palm has three natural sides—the heel, the left side, and the right side—and that the top of the palm is difficult to define. MadGrip thus defined the top of the palm as "a front corresponding to knuckles of the fingers." West Chester's proposal, allowing for "knuckles" to include any number of knuckles within the fingers, makes little sense to the extent that the language is clearly trying to define "palm edges."

Accepting West Chester's construction of "a knuckle" leans away from defining a palm and begins to involve both the palm and the fingers. That construction would be contrary to a plain reading

of the term "palm edges," and the Court declines to adopt West Chester's expansive definition.

#### D. The "Saddle" in Claim 6

Claim 6 states: "The method of claim 1 wherein the molded portion includes a saddle between the thumb and a first finger that extends continuously from a palm side to a back side of the glove." West Chester argues that this claim describes a raised pad between the thumb and forefinger, and that the term should be construed as "a pad of elastomeric material between the thumb and first finger that is thicker than the surrounding molded portion."

The parties agree that the "saddle area" of the glove is the area between the thumb and forefinger of the glove and wraps from the front of the glove to the back of the glove. MadGrip does not believe that the term "saddle" needs to be further construed. To the extent that construction is required, MadGrip submits that "saddle" in Claim 6 should be read simply as "the area between the thumb and the first finger has elastomeric material that extends from the palm side of the glove to the back side of the glove."

The specification states that "[t]he mold would also rise in between the index finger and the thumb, forming a saddle . . . ."

Other parts of the specification similarly refer to a raised portion or area at the saddle. These statements, however, do not

necessarily mean that the raised portion is higher than any surrounding raised portions. It is clear from the drawings in the patent that areas around the saddle, including the palm and the fingers, are molded and raised. West Chester's reading, that a portion is raised higher than surrounding areas, lacks intrinsic evidentiary support. The Court will therefore adhere to MadGrip's view of the saddle.

## III. Conclusion

The Court has reviewed the evidence presented by the parties and finds that MadGrip's constructions are most consistent with the claims and specification, and are not undermined by the lengthy prosecution history. The Court therefore adopts MadGrip's proposed constructions.

DATED at Burlington, in the District of Vermont, this  $27^{\rm th}$  day of September, 2017.

/s/ William K. Sessions III William K. Sessions III District Court Judge