IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

RIDDELL, INC.,	
Plaintiff,	
vs.) Case No. 16 C 4496
KRANOS CORPORATION d/b/a SCHUTT SPORTS,	
Defendant.	
RIDDELL, INC.,	
Plaintiff,	
vs.) Case No. 16 C 4498
XENITH, LLC,	
Defendant.)

MEMORANDUM OPINION AND ORDER

MATTHEW F. KENNELLY, District Judge:

Riddell has sued Kranos Corporation—doing business and referred to here as Schutt Sports—and Xenith, LLC, alleging that the two companies are infringing three of Riddell's patents for football helmets. Both defendants have filed motions for claim construction. The parties submitted written briefs, and the Court held a claim construction hearing on May 19, 2017. This opinion sets forth the Court's construction of disputed claim language.1

¹ Riddell's suit against Xenith, Case No. 16 C 4498, is assigned to Judge Thomas Durkin. The undersigned judge is presiding over pretrial proceedings in the two cases

Background

Riddell manufactures and sells football equipment including helmets. The company owns two patents—U.S. Patent Nos. 8,528,118 and 8,938,818—both of which are titled "Sports Helmet." Both patents relate generally to a protective helmet with a plastic shell and a raised central band that adds strength and rigidity to the helmet without requiring additional material and therefore without adding additional weight. The helmets also allow for the placement of vent openings on the shell to provide ventilation. The '118 patent was issued in September 2013, and it was reexamined and amended in September 2014. Am. J.A. in Supp. of Cl. Constr. Br. (JA) 24. The application for the '818 patent was issued in January 2015 as a continuation of the '118 patent. JA722. The parties therefore largely focus their analyses on the language in the '118 patent.

Riddell also owns a patent, U.S. Patent No. 8,813,269, directed at a particular type of faceguard for its football helmets and titled "Sports Helmet with Quick-Release Faceguard Connector and Adjustable Internal Pad Element." JA2080. Riddell's design is intended to decrease the time it requires to remove the faceguard from a football helmet by eliminating the "laborious process of unscrewing a threaded fastener." Pl. Riddell, Inc.'s Responsive Cl. Constr. Br. (Pl.'s Resp. to Schutt) at 3. The application for the '269 patent was filed in April 2008, and the patent was issued in August 2014.

Both defendants also manufacture and sell sports helmets. Riddell claims that Schutt's line of Vengeance football helmets infringe claims 1, 5–6, 11–13, 25, 30, 32–34, and 36 of the '118 patent and claims 1–3, 5–6, 8–12, 40–42, 49–50, 53, 56–58, 60–

pursuant to an order entered by the district's Executive Committee under N.D. III. Internal Operating Procedure 13(e).

61, and 65 of the '818 patent. Pl.'s Resp. to Schutt at 2. Riddell also claims that this line of helmets, as well as other models, infringe claims 1, 3–9, 13–20, and 22–23 of the '269 patent. *Riddell, Inc. v. Kranos Corp.*, No. 16 C 4496, Compl. ¶¶ 40–51. Riddell claims that Xenith manufactures helmets that infringe claims 1–2, 5–6, 11–13, 25–28, 30, and 32–37 of the '118 patent and claims 41–49, 51–52, 58, and 62–65 of the '818 patent. *Riddell, Inc. v. Xenith*, LLC, No. 16 C 4498, Compl. ¶¶ 8–35. Riddell does not claim that Xenith is infringing the '269 patent.

Both defendants have requested construction of a number of terms appearing within these three patents; Riddell argues in most instances that the terms do not require construction. For the most part, defendants request construction of the same phrases and propose virtually identical constructions. There are some variations, in which either 1) only a single defendant proposes construction of a particular phrase; 2) defendants argue instead that the phrase is invalid as indefinite under 35 U.S.C. § 112; or 3) a defendant both offers a construction and argues in the alternative that the phrase is indefinite.

Claim 1 of the '118 patent is largely representative of the disputed language in both the '118 patent and the '818 patent:

A football helmet comprising:

a plastic shell configured to receive a head of a wearer of the helmet, the shell having:

a front region,

a crown region,

a rear region,

two side regions wherein each side region has an ear flap with an ear opening,

a raised central band integrally formed as part of the shell and extending across the crown region to the rear region,

a first plurality of vent openings formed in the shell outside of the raised central band, wherein the first plurality of vent

openings are aligned, and positioned along a first side of the raised central band; and

a chin strap assembly that releasably secures the helmet to the wearer.

JA24, 1:24-40.

Only Schutt requests construction of the '269 patent. This patent discloses "an improved sports helmet including a quick release connector assembly for the faceguard that allows for rapid disconnection of the faceguard from the helmet shell." JA2080.

Claim 1 of the '269 patent discloses:

A sports helmet comprising:

- a shell;
- a faceguard;
- a faceguard connector assembly having a bracket with at least one channel that receives an extent of the faceguard, the faceguard connector assembly further having a releasable coupler mechanism that extends through both the bracket and an opening in the shell to secure the faceguard to the shell in a use position, the releasable coupler mechanism including:
 - a washer having a main body that extends substantially perpendicular from a flange of the washer, the main body having a central opening and extending into and positioned within the shell opening;
 - a cylindrical body that extends through the bracket and the shell opening, wherein an extent of the cylindrical body is received by the central opening of the washer in the use position; and a head positioned within the bracket, the head configured to receive a tool that applies an actuation force; and
- wherein the actuation force is applied to the coupler mechanism to move the coupler mechanism from the use position to a disconnected position that allows for removal of the bracket from the shell to permit the faceguard to be displaced with respect to the shell.

JA2095, 9:21–46. Claim 2 discloses "[t]he sports helmet of claim 1, wherein the application of the actuation force lacks a rotational component." *Id*, 9:47–48.

The Court analyzes the disputed terms in the sequence listed by the parties in their joint claim construction chart and status report. Dkt. no. 130. Because each disputed phrase often has three proposed constructions—or at least three separate

arguments—the Court will not list each one here, but instead will do so at the beginning of the section of the analysis discussing each phrase. These proposed constructions are taken from the joint claim construction chart and status report that the parties filed with the Court. See dkt. no. 130. The parties differentiate between phrases for which defendants propose a particular claim construction and phrases that defendants contend are indefinite. Under the parties' organization, a phrase is in the latter category even if one of the defendants has proposed a particular construction. For the sake of consistency, the Court organizes its analysis in the same way.

Discussion

Claim construction begins with the words of the claim itself. *Takeda Pharm Co. Ltd. v. Zydus Pharm. USA, Inc.*, 743 F.3d 1359, 1363 (Fed. Cir. 2014). The terms used in the claims bear a "heavy presumption that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202 (Fed. Cir. 2002) (internal quotation marks omitted). The ordinary meaning is the one derived from reading the claims in the context of the specification and prosecution history. *Starhome GmbH v. AT&T Mobility LLC*, 743 F.3d 849, 856 (Fed. Cir. 2014). Because of this, the specification is "the single best guide to the meaning of a disputed term." *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348, 1361 (Fed. Cir. 2013). The specification may reveal a particular definition given to a term by the patentee that differs from the meaning it would otherwise possess. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc).

The prosecution history also "provides evidence of how the PTO and the inventor

understood the patent." *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1905 (Fed. Cir. 2013). This history, however, "often lacks the clarity of the specification and thus is less useful for claim construction purposes." *AIA Eng'g Ltd. v. Magotteaux Int'l S/A*, 657 F.3d 1264, 1272 (Fed. Cir. 2011).

There are two exceptions to the general rule that claim terms are given their ordinary meaning: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution." *Starhome*, 743 F.3d at 856. Disavowal of claim scope can occur either through amendment to the claims or arguments made during prosecution of the patent. *Aylus Networks, Inc. v. Apple Inc.*, 2017 WL 1946961, at *4 (Fed. Cir. May 11, 2017). Regardless, any disavowal must be clear and unmistakable. *Schindler Elevator Corp. v. Otis Elevator Co.*, 593 F.3d 1359, 1366 (Fed. Cir. 2015). Ambiguous statements will not suffice. *Id*.

A. "Raised central band"

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
raised central band	a segment that is raised with respect to the shell, has a width defined by a pair of opposed side walls, and includes lower side portions that extend from the rear region towards the side regions of the shell to terminate near the ear openings in the shell. alternatively, invalid under 35 U.S.C. § 112 as lacking a written description and / or nonenabled	same as Schutt	plain and ordinary meaning

Defendants ask the Court to construe the phrase "raised central band" as indicated above. In doing so, defendants appear to divide their arguments between

whether the phrase includes the limitation "raised with respect to the shell" and whether the phrase includes the remaining limitations in the above proposal. Schutt also argues, in the alternative, that the phrase is invalid under 35 U.S.C. §112. Riddell asks the Court to give the phrase the plain and ordinary meaning.

1. Proposed construction

The Court agrees with Riddell that this phrase should be given its plain and ordinary meaning. The meaning of the phrase "raised central band" would be readily apparent to a lay juror—not to mention a person skilled in the art of designing protective sportswear—and therefore does not require further construction by the Court.

a. The limitations "a width defined by a pair of opposed side walls" and "lower side portions that extend from the rear region towards the side regions of the shell to terminate near the ear openings in the shell"

Schutt argues primarily that each time the raised central band is discussed in the two patents, it is described as having a width defined by a pair of opposed side walls and lower side portions that extend from the rear region to the side regions of the shell.

Both of these features are listed in the abstract's description of the central band:

The shell also includes a raised central band that extends from the front region across the crown to the rear region. The central band has *lower side portions that extend from the rear region towards the side region of the shell and terminate proximate an ear opening in the shell.* The central band has a *width defined by a pair of opposed sidewalls* that extend transversely from an outer surface of the shell.

JA1 (emphasis added). The specification also discusses these features in the detailed description section. The specification indicates that "[t]he band 63 has a width defined by a pair of opposed sidewalls 63a that extend outward or transversely from the outer surface of the shell 31." JA17, 6:20-22. It goes on to state that the "band 53 also has opposed lower side portions 63b, wherein each side portion 63b extends from the rear

region 40 to a lower portion of the ear flap 32 and terminates proximate the ear opening 112." *Id.*, 6:24–27. Schutt argues that because these are the only two discussions of the raised central band, the patentees defined the phrase to include these limitations. Kranos Corp. D/B/A Schutt Sports' Opening Cl. Constr. Br. (Schutt's Br.) at 8.

But these statements are insufficient to indicate that the patentees acted as their own lexicographers and redefined the meaning of "raised central band." First, the doctrine of claim differentiation creates a presumption that these limitations should not be imparted into the claim language. This doctrine "stems from the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings or scope." *Seachange Int'l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1368 (Fed. Cir. 2005) (internal quotation marks omitted). Thus when limitations are expressly included in one claim, a rebuttable presumption arises that those limitations are not encompassed by different language in different claims. This rule has its strongest application "where the limitation sought to be read into an independent claim already appears in a dependent claim," but it also applies to two independent claims using different language. *Id.* at 1368–69 (internal quotation marks omitted).

Riddell points to numerous instances where the language that Schutt proposes exists in other claims in the '118 and '818 patents:

- claims 25 and 34 of the '118 patent and claims 1, 5, 14, and 19 of the '818 patent define the band as "having a width defined by a pair of opposed side walls," JA24–25, 743–44;
- claims 3 and 18 of the '118 patent—both dependent claims—define the band as having "lower side portions . . . wherein each lower side portions extends from the rear region of the shell towards the ear flap region of the shell," JA21–22; and
- claims 4 and 7 of the '118 patent and claims 45 and 48 of the '818 patent—all

dependent claims—define the band as having a lower side portion that "terminates proximate the ear opening in the ear flap," JA21, 745.

Thus the language of these claims creates a rebuttable presumption that the phrase "raised central band," when used by itself as it is in claim 1, does not include these limitations.

This presumption, however, is not "a hard and fast rule of construction," and it cannot be used to broaden claims beyond their proper scope as determined via the specification and the prosecution history. Seachange, 413 F.3d at 1369. Schutt argued at the hearing that, because the patentees frequently used the phrase "present invention" when discussing these features, they narrowed the meaning of the phrase to require these features. Schutt's Br. at 9 n.11. The patentees begin the abstract by stating that the "present invention provides a protective sports helmet" and then goes on to list features of the invention, including some of the limitations that Schutt proposes to include in the interpretation of the "raised central band" language. The patentees also use the phrase "present invention" when describing certain figures in the patent. For example, the specification states that "FIG. 19 is a side view of the helmet of the present invention, illustrating the chin protector connector of the football helmet of Fig. 1A." JA16, 4:42–44. The Federal Circuit has occasionally found the phrase "present invention" to narrow claim scope, but this typically occurs where the patentee uses the phrase consistently when discussing a particular limitation. See, e.g., Absolute Software, Inc. v. Stealth Signal, Inc., 659 F.3d 1121, 1136 (Fed. Cir. 2011). The court in Absolute Software went on to indicate that the phrase does not always impart limitations where the references are not uniform or where other aspects of the intrinsic evidence do not support applying the limitation to the entire patent. *Id.*

Such is the case here. The patentees' use of the phrase "present invention" is not sufficiently uniform to justify imparting these limitations into the claim language. The abstract is the only location in which the phrase "present invention" could be construed as expressly referencing those features. In each of the figure descriptions using this phrase, the patentees do not mention the limitations advanced by Schutt. Instead, these figure descriptions each focus on a different aspect of the invention. See JA16, 3:63–64 (describing the figure as "showing a face guard of the present invention"); *Id*, 3:66–67 (same); *Id*, 4:26–28 (describing the figure as "showing a crown pad in accordance with the present invention"); *Id*, 4:42–44 (describing the figure as "the present invention, illustrating the chin protector connector"). Thus the patent does not consistently include these features when it describes what the "present invention" is, and therefore use of the phrase does not narrow the meaning of "raised central band."

Schutt argues that each these figures portrays a raised central band that contains its proposed limitations and therefore that the claim scope must be narrowed in this way. But the fact that one embodiment depicts a particular limitation does not mean that this limitation can be imparted to the claim as a whole. The Federal Circuit has repeatedly indicated that claims are not limited "merely because the embodiments in the specification all contain a particular feature." *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 865 (Fed. Cir. 2004). Schutt has not persuaded the Court that these limitations must be read into the claim language.

b. The limitation "a segment that is raised with respect to the shell"

Schutt also argues that the phrase "raised central band" includes the limitation that the band is "a segment that is raised with respect to the shell." First, Riddell notes

that Schutt did not disclose this proposed limitation during the claim construction exchange process as required under Local Patent Rule 4.1 and implies that Schutt has waived this argument. Pl.'s Resp. to Schutt at 5 n.6. The Federal Circuit grants district courts broad discretion in the enforcement of local patent rules. Allvoice Devs. US, LLC v. Microsoft Corp., 612 F. App'x 1009, 1014 (Fed. Cir. 2015). The Court finds that Schutt has not waived the ability to argue this limitation.2

Schutt first argues that the limitation is supported by the claim language because claim 25 of the '118 patent discloses "a raised central band integrally formed in the shell." JA24, 2:42; see Schutt's Br. at 9. This phrase does not support Schutt's proposed construction, as it does not provide any more detail than what already exists in the claim language itself. This phrase contains the words "raised central band"—i.e. the precise phrase the Court is being asked to construe. And the remainder of the phrase—"integrally formed in the shell"—is a disputed phrase for which Schutt proposes an entirely different construction later in its brief. Therefore this language does not indicate how the Court should construe the disputed phrase.

Schutt next contends that the prosecution history supports a construction of "raised central band" that indicates it is "raised with respect to the shell." At one point during examination, the Patent & Trademark Office (PTO) rejected a number of claims in the '118 patent as anticipated by prior art known as the Schneider reference because that patent also disclosed a raised central band. The '118 patentees responded that the "firm section 20 extending across the top of Schneider's shell 14 cannot be construed

² Riddell makes this same argument in response to a number of other limitations proposed by defendants. The Court will likewise address these arguments on their merits and will not find that defendants have waived them.

as the claimed raised central band because it is not, in fact raised with respect to the shell 14. Instead, the firm section 20 is flush with the adjacent resilient sections 22 that flank the firm section 20 of the shell 14." JA584. The patentees argued essentially that the Schneider invention consisted of a helmet with a smooth shell containing no bumps or protrusions. *Id.* This history does suggest that the raised central band is raised with respect to the shell. But the Court fails to see how this differs from the plain and ordinary meaning of the phrase as written and thus finds it unnecessary to construe the claim further.

Schutt argues that relying on the "plain and ordinary meaning" of a phrase without construing it violates federal law. Kranos Corp. D/B/A Schutt Sports' Responsive Cl. Constr. Br. (Schutt's Reply) at 1. The Federal Circuit has indicated that when parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it. Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc., 815 F.3d 1314, 1318 (Fed. Cir. 2016). The court in *Eon* indicated that a determination that a claim term "has the plain and ordinary meaning may be inadequate when a term has more than one ordinary meaning or when reliance on a term's ordinary meaning does not resolve the parties' dispute." *Id.* (internal quotation marks omitted). The Federal Circuit has also indicated, however, that cases exist in which "the ordinary meaning of claim language 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." O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd., 521 F.3d 1351, 1360 (Fed. Cir. 2008). The Court finds this to be one of those cases. The ordinary meaning of "raised central band" is readily

apparent to persons skilled in the relevant art. Thus it is unnecessary to adopt defendants' construction.

2. Indefiniteness

Defendants also argue that the patents at issue do not describe "what the band is raised in relation to" and therefore that claims including this phrase are invalid as indefinite under 35 U.S.C. § 112. Xenith's Br. at 15. In support, Xenith points to the same prosecution history discussed above, in which the patentees distinguished prior art by stating that the band in that case was "not, in fact, raised with respect to the shell." JA584. Xenith argues that the public is entitled to rely on this statement but that doing so leads to a nonsensical result. According to Xenith, because some of the claims at issue state that the raised central band is "formed as part of the shell," the band would have to be raised with respect to itself. Xenith's Br. at 15–16. Xenith argues that because the public has no standard for determining whether the band meets this criterion, the claims are indefinite.

The Court finds that this phrase is not indefinite. The standard for indefiniteness is whether "a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). As discussed above, the phrase "raised central band" has a plain and ordinary meaning that would be evident to a person skilled in the relevant art. This plain meaning is supported by statements in the prosecution history, such as when the patentees distinguished prior art by indicating that the band in that invention was "flush with adjacent resilient sections." JA584.

The Court concludes that the phrase "raised central band" has its plain and ordinary meaning and is not otherwise indefinite.

B. "A width defined by a pair of opposed side walls"

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
a width defined by a pair of opposed side walls	having/has two walls with outer surfaces that always face away from each other to create a single width or distance from outer wall surface to outer wall surface at any given point along the length of [the raised central band] as the outer wall surfaces extend continuously and uninterrupted in a longitudinal direction from the front to the back of the shell	none	plain and ordinary meaning
	alternatively, invalid under 35 U.S.C. § 112 as lacking written description and / or non-enabled		

Schutt next asks the Court to construe the phrase "a width defined by a pair of opposed side walls" as indicated above. As Riddell points out, Schutt's proposed construction of this phrase appears to be an attempt "to exclude sidewalls that are not oriented in a straight line (such as the general zig-zag configuration of Schutt's side walls)." Pl.'s Resp. to Schutt at 14. In doing so, Schutt again argues that language in the specification supports imparting these limitations into the claim language.

The Court again concludes that this phrase can be construed simply by adopting its plain and ordinary meaning. Terms such as "pair," "width," "opposed," and "side walls" have meanings that are readily apparent to a person skilled in the art and do not require additional construction by this Court. Further, the additions proposed by Schutt—such as "with outer surfaces that always face away from each other"—are more likely to confuse rather than clarify the meaning of the claim language, as the

Court itself is still unsure of what Schutt intends these phrases to mean. The same is true for the phrase "to create a single width or distance from outer wall surface to outer wall surface." The Court reads this proposed construction to require the raised central band to have the same width as it proceeds along the shell of the helmet. If this were the case, Schutt's construction would exclude embodiments clearly depicted in the '118 patent, in which the raised central band widens as it approaches the rear of the helmet. When questioned about this at the hearing, Schutt stated that its construction does not exclude these embodiments and that "single width" here does not mean the same width across the shell. The Court fails to see how this can possibly be so given the ordinary meaning of the terms used in Schutt's proposed construction. The bottom line is that the Court sees no basis to adopt Schutt's convoluted and confusing definition of a phrase that has a readily apparent plain meaning.

Further, the specification itself does not indicate that the patentees defined the phrase to have a scope narrower than this plain meaning. Schutt points to two statements that are in both the abstract and the specification. The first statement that Schutt cites indicates that the central band "extends from the front region across the crown to the rear region." Schutt's Br. at 10; JA1; see also JA17, 6:16–17. But this statement does not indicate that, as Schutt proposes, the band (or, really, its borders) must be continuous and uninterrupted—that is, without zigs and zags—which is what Schutt proposes. The second statement that Schutt cites from the specification is that the central band "has a width defined by a pair of opposed sidewalls." Schutt's Br. at 10; JA1; see also JA17, 6:20–21. But this phrase is identical to the language in the claim; it does not suggest an additional limitation that the walls have outer surfaces that

always face away from each other or that the wall has a single width at any given point. In sum, the language of the specification that Schutt cites does not support its proposed construction.

Schutt next argues that the claims themselves support its proposed construction because the language of the claims is consistent with the limitations that it proposes. Schutt points first to the numerous instances in the claims where the patent uses phrases such as "extending across the crown region to the rear region," "extends from the front region across the crown region to the rear region," and "extending between the crown region and the rear region." Schutt's Br. at 11-12. Schutt argues that this language is consistent with a construction that the sidewalls extend continuously and uninterrupted from the front to the rear of the shell. But the fact that the claims may be consistent with a limitation does not require reading that limitation into the claim language. See C.R. Bard, 388 F.3d at 865. Although the claims as written cover embodiments that contain that limitation, they may also encompass embodiments that do not. Schutt makes an identical argument for its limitation that the walls must "always face away from each other to form a single width," based on the patent's use of phrases such as "along a first side of the raised central band," "along a first side wall of the raised second band," and "the side wall." Schutt's Br. at 12. This argument fails for the same reason. The language that Schutt cites does not require that the walls always form a single width. And although the claim language discloses embodiments that adhere to Schutt's construction, the language is not so restrictive as to be limited to only those embodiments.

The Court therefore declines to construe this phrase beyond its plain and

ordinary meaning.

C. "Integrally formed"

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
integrally formed	constructed or attached together as a single or integrated unit	one or more pieces fixed or attached together as a single or integrated unit	plain and ordinary meaning, with the clarification that the plain meaning does not include a separate element attached to the shell

The phrase "integrally formed" is used to describe the raised central band in relation to the rest of the shell: the helmet includes "a raised central band integrally formed as part of the shell." JA21, 14:25–26. The parties essentially disagree over whether this language can include two distinct pieces that are permanently attached together (defendants' contention) or whether the definition must be limited to a band that exists as an inseparable part of the shell (Riddell's contention).

Looking first at the claim itself, the ordinary meaning of the term "integral" can clearly encompass more than a one-piece construction. The term "integral" is defined simply as "formed as a unit with another part." *Merriam-Webster's Collegiate Dictionary* 607 (10th ed. 1999). And the Federal Circuit has repeatedly found, in the context of particular patents, that the patentee's use of the term "integral" encompassed both a unitary object and an object with multiple attached parts. *See In re Larson*, 340 F.2d 965, 967–68 (C.C.P.A. 1965); *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 887 F.2d 1070, 1073–74 (Fed. Cir. 1989); *Henderson v. Grable*, 339 F.2d 465, 470 (C.C.P.A. 1964); *In re Morris*, 127 F.3d 1048, 1055–56 (Fed. Cir. 1997).

In proposing this phrase for construction, however, defendants have removed it from the context that informs its meaning. The patent does not state that the raised

central band is integrally formed, period. Rather, it states that the raised central band is integrally formed as part of the shell. Thus although the term "integral" by itself may not require the structure to be a one-piece construction, the use of the phrase "integrally formed as part of the shell" quite plainly does.

Further, the patentees disavowed more than a one-piece construction during prosecution of the patent. During prosecution, the PTO rejected claims 1–7 and 26–31 in the '118 patent as anticipated by prior art known as the Carlini reference, in view of another piece of prior art known as the Strohm reference. JA127. The patentees offered a lengthy explanation for why their helmet was not anticipated by these references. They stated first that the combination of these two pieces of prior art "fails to disclose a raised central band *integrally formed* as part of a plastic shell." JA157. The patentees noted that the Strohm reference "teaches protecting the top of the player's head by optionally *attaching an external resilient pad 14 to the crown portion of a rigid outer helmet shell 12.*" *Id.* They concluded by stating that a person skilled in the art would recognize that the Strohm reference teaches the use of an optional, separately attached pad that has material properties that are different from the underlying rigid shell and that the reference is "devoid of any disclosure suggesting that the external resilient pad 14 should be integrally formed in the shell 12." JA157–58.

Defendants argue that these statements do not unmistakably disavow two-piece constructions. They argue instead that the patentees distinguished Strohm because 1) its helmet included an optional, removable pad, instead of one that was permanently attached as a two-piece construction; and 2) Strohm's pad had different material properties than the underlying shell. Schutt's Reply at 13; Xenith's Br. at 5–6. But the

patentees' statement regarding the material properties of Strohm's components actually supports Riddell's claim of disavowal and illustrates Riddell's construction of "integrally formed" as a one-piece construction. Because the pad attached in Strohm had material properties from those of the shell, it could not possibly be "integrally formed" as described in the '118 patent. Further, in distinguishing Strohm, the patentees again used the phrase "integrally formed as part of a plastic shell," which the Court has already indicated identifies a one-piece construction.

Defendants then argue that, during reexamination of the '118 patent, the examiner again interpreted the term "integral" to encompass embodiments that were two-piece constructions, albeit in a different context. During prosecution, the examiner determined that claims 8 and 9 from the '118 patent (which are not at issue in this case) were anticipated by prior art known as the Crow reference because the Crow reference disclosed an integral jaw flap. Defendants argue that in reaching this conclusion, the examiner relied on an embodiment of the Crow patent in which the jaw flap was secured to a baseball helmet with rivets, and therefore effectively determined that two-piece constructions qualify as integral. Schutt's Br. at 19 (citing JA561); Xenith's Br. at 6–7. Even if defendants were correct, it is not clear what this has to do with the claim term under consideration here. Claim 8 of the '118 patent discloses the "football helmet of claim 1, further comprising an *integral* jaw flap." JA21, 14:50–51 (emphasis added). This is different from the phrase used to describe the raised central band—integrally formed as part of the shell—that the parties now dispute. Further, in making this point, the examiner was not actually describing a jaw flap secured by rivets. The examiner specifically cited to a portion of the Crow reference which stated: "Although the

foregoing description pertains to protective flaps 11 as a separate element attached to a helmet shell 15, it should now be apparent that the entire shell incorporating the protective flap 11 can alternatively be manufactured as a unitary article." Consol. Decl. of Christopher G. Hanewicz in Supp. of Pl. Riddell, Inc.'s Responsive Cl. Constr. Brs. (Hanewicz Decl.), Ex. 3 at 5:29–34; see also JA561. Thus the examiner appears to have determined that the Crow reference disclosed an integral jaw flap because it described an embodiment in which the shell and the protective flap were manufactured as a unitary article, as opposed to the alternative wherein the flap could be "retrofitted to existing batting helmets including the conventional ear cover 22, simply by drilling the appropriate holes 30a in the ear cover to accommodate the fastening rivets 30, or screws or the like." Hanewicz Decl., Ex. 3 at 5:12–16. This history therefore does not support defendants' proposed construction.

In sum, though the Federal Circuit has indicated that the broadest meaning of the word "integral" encompasses more than a one-piece construction, the patentees disavowed such a broad scope both by the specific claim language indicating that the band is "integrally formed as part of the shell" and by their statements during prosecution. The Court therefore construes "integrally formed" to mean "not including a separate element attached to the shell."

D. Whether the following phrases are invalid as indefinite, lacking written description, and / or non-enabled under 35 U.S.C. § 112.

A court evaluates definiteness from the perspective of someone skilled in the relevant art and reads the claims in light of the patent's specification and prosecution history. *Nautilus*, 134 S. Ct. at 2128. The requirement that a patent be definite involves a "delicate balance" that weighs "the inherent limitations of language" against the need

to "afford clear notice of what is claimed" to the public. *Id.* at 2128–29. The Supreme Court has defined the appropriate evaluation as whether "a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Id.* at 2129.

1. "A first plurality of vent openings formed in the shell outside of the raised central band, wherein the first plurality of vent openings are aligned, and positioned along a first side of the raised central band" and other similar phrases

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
a first plurality of vent openings formed in the shell outside of the raised central band, wherein the first plurality of vent openings are aligned, and positioned along a first side of the raised central band	Schutt's Proposal the vent openings are located completely outside the width of the raised central band at all points along the raised central band such that the raised central band is positioned between the first and second plurality of aligned vent openings alternatively, invalid under 35 U.S.C. § 112 as lacking written description and / or non-enabled	invalid under 35 U.S.C. § 112 as indefinite alternatively, placement is limited to placements disclosed in figs. 1,1A, 19, and 20 of the patent	Riddell's Proposal plain and ordinary meaning; the term "along" should be construed as "beside"

a. Schutt's proposed construction

In its opening brief, Schutt proposed a construction for phrases discussing the location of the helmet's vent openings indicating that "[t]he vent openings are located completely outside the width of the raised central band at all points along the raised central band." Schutt's Br. at 13. In its response brief, Riddell conceded that the '118 and '818 patents do not disclose vent openings that fall within the raised central band. Riddell then interpreted Schutt's proposed construction as requiring all vent openings to fall outside the widest point of the raised central band, and it proceeded to argue against this construction.

It became clear at the claim construction hearing, however, that the meaning of

this phrase is not actually in dispute. Schutt indicated that Riddell's understanding of its proposed construction is incorrect. In other words, Schutt is not arguing that the patents only disclose vent openings that fall outside the widest point of the raised central band. Rather, Schutt appears to agree that this claim language simply discloses that any vent openings are located completely outside the raised central band. Instead, Schutt argues that some of the vent openings on its allegedly infringing products are not located completely outside the raised central band because those products do not have a "raised central band" that conforms to Schutt's proposed construction of *that* phrase.

The parties have thus demonstrated that any dispute regarding whether Schutt's products meet the vent opening limitation of the patents at issue depends only on the Court's constructions of "raised central band" and "a width defined by a pair of opposed side walls." Therefore the Court does not need to construe the phrases discussing the location of the vent openings.

b. Xenith's indefiniteness argument

In arguing that the claim language regarding the vent openings is indefinite, Xenith relies in part on the doctrine of claim differentiation. Xenith points out that the patents use two different phrases when discussing the vent openings. Xenith's Br. at 11. In some instances, the patents say that the vent openings "reside" outside of or along the raised central band. See JA24, 2:49–50 (claim 25 of the '118 patent); JA745, 18:29–30 (claim 41 of the '818 patent). In others, the patents say that the vent openings are "positioned" beyond or along the raised central band. See JA24, 1:37–38 (claim 1 of the '118 patent); JA746, 20:26–27 (claim 62 of the '818 patent). Xenith notes that claims 41 and 62 of the '818 patent have identical language aside from the terms

referring to the location of the vent openings. It therefore argues that the doctrine of claim differentiation requires assigning different meanings to the phrases regarding positioning of the vent openings. But, Xenith contends, none of the intrinsic evidence provides a basis for determining what these phrases mean and how they differ and therefore the claims are indefinite.

The Federal Circuit has indicated that the presumption created by claim differentiation is "especially strong" where "the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into an independent claim." InterDigital Commc'ns, LLC v. Int'l Trade Comm'n, 690 F.3d 1318, 1324–25 (Fed. Cir. 2012). But the Federal Circuit has also stated that "claim drafters can also use different terms to define the exact same subject matter," particularly when the different terms are used in separate independent claims. Curtiss-Wright Flow Control Corp. v. Velan, Inc., 438 F.3d 1374, 1380 (Fed. Cir. 2006). This appears to be the case here. Claims 41 and 62 are both independent claims, reducing the strength of the claim differentiation presumption. Further, the Federal Circuit has indicated that any attempt to attribute significance to the patentee's use of different language in separate claims "must be grounded in reasonable meanings" of the phrases themselves. See Wi-LAN USA, Inc. v. Apple Inc., 830 F.3d 1374, 1392 (Fed. Cir. 2016). Here, the plain and ordinary meanings of the two phrases used in claims 41 and 62—"residing outside" and "positioned beyond"—are identical or virtually so and do not justify ascribing different definitions.

The prosecution history also supports the proposition that the patentees intended

these two phrases to have the same meaning. During prosecution of the '118 patent, the examiner initially found that the phrases discussing the positioning of the vent openings had "no clear and definite meaning as to the location of the vents relative to [the] shell or central band." JA2025. After an interview, the patentees and the examiner then agreed that figures 1, 1A, 19, and 20 "show the positional relationship of the helmet shell's raised central band and vent openings." JA2046. The patentees and the examiner therefore agreed that these figures demonstrate the meaning of both phrases describing the vent positioning. This clarification is sufficient to overcome the presumption created by claim differentiation. See Retractable Techs., Inc. v. Becton, Dickinson and Co., 653 F.3d 1296, 1305 (Fed. Cir. 2011) (noting that the presumption "will be overcome by a contrary construction dictated by the . . . prosecution history).

In response, Xenith argues that if the Court accepts this argument, it should conclude that the scope of the claim language is limited to only those embodiments in the four figures cited in the interview. But the patentees' statement regarding the figures is insufficient to constitute a clear and unmistakably disavowal of claim scope that would otherwise fall within the claim language. And courts typically do not limit claims to cover only preferred embodiments depicted in figures accompanying the patent. More importantly, it is not clear what effect (if any) limiting the scope of this phrase to the positions in these figures would have on construction. As Riddell argued, the figures were used to demonstrate to the examiner that the vent openings must fall entirely outside of the raised central band. Xenith has failed to explain what other limitations the figures might depict that should be construed as narrowing the claim language.

The Court therefore concludes that these disputed phrases are not indefinite and

declines to limit their scope to only those embodiments in the figures.

2. "A plastic shell configured to receive a head of a wearer of the helmet, the shell having a front region, a crown region, a rear region, two side regions" and the phrase "ear flap region"

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
region	invalid as indefinite, lacking written description, and / or non-enabled	invalid as indefinite	plain and ordinary meaning

In discussing phrases using the term "region," both defendants argue only that these phrases are invalid as indefinite; they do not propose any construction.

Defendants contend that the word "region" is broad, ambiguous, and open to many possible interpretations. They argue that the patents' failure to delineate the boundaries of each region of the helmet described in the claims is problematic, as several features of the patents depend on these boundaries. Schutt's Br. at 24 (citing JA24 for the statement "a raised central band . . . extending across the crown region to the rear region); see also Xenith's Br. at 9. Riddell argue that the phrase has its plain and ordinary meaning.

Phrases in the patents that use the term "region" do not render claims using this term invalid as indefinite. Courts addressing use of this term in other contexts have indicated that it is not inherently indefinite. See Athletic Alternatives, Inc. v. Benetton Trading USA, Inc., 174 F. App'x 571, 575 (Fed. Cir. 2006) (finding that use of term region to refer to a general portion of the invention does not make the claim invalid); Herman Miller, Inc. v. Teknion Corp., 504 F. Supp. 2d 360, 370 (N.D. III. 2007) (finding that term "lumbar region" is not indefinite when a person skilled in the art would recognize the approximate area that it refers to); One World Techs., Ltd. v. Rexon Indus. Corp., Ltd., No. 04 C 4337, 2005 WL 1377897, at *6 (N.D. III. June 3, 2005)

(finding that "region of the cut" is not a "stellar example of claim drafting" but was also not sufficiently ambiguous to make the claim invalid as indefinite). Here, the term "region" always appears with a descriptor (front, crown, side, etc.), and defendants do not argue that these descriptors are indefinite. See Schutt's Br. at 24. Like the cases cited above, the term "region," when combined with these descriptors, is sufficient to permit one skilled in the art to understand with reasonable certainty what the claim language references.

The Court notes that, in the cases cited above, the courts applied a standard for indefiniteness based on "insoluble ambiguity" that the Supreme Court eventually rejected in *Nautilus*. Thus the burden for demonstrating that language is not indefinite has become somewhat higher since these cases were decided. But the patents in this case provide sufficient context to defeat a challenge based on indefiniteness, even under a standard that requires reasonable certainty. The '118 patent includes numerous figures that label and identify the various regions of the helmet. See JA17, 5:2–5; JA4–14, Figs. 1, 1A, 13, 19, & 20. Though the figures do not provide specific boundaries, they depict the general location of each region and the components of the invention that fall within each one. Further, the prosecution history demonstrates that one skilled in the art of protective sports gear would be reasonably certain of the location of each of the regions. During reexamination of the '118 patent, the PTO rejected claims 1–7 and 11–13 because they were anticipated by the Schneider reference. JA558. In doing so, the PTO concluded that the Schneider reference disclosed features similar to those in the '118 patent by determining that the Schneider features were located in the same regions as the corresponding features in the '118

patent. JA559. This indicates that the wording of the '118 patent is sufficient to inform a person skilled in the art of the approximate location of the regions and therefore to make sufficiently clear what is disclosed by the patent.

Xenith also argues that the term "region" is indefinite because it fails to clearly define the location of certain features of the invention that use this term. Xenith's Br. at 9. Xenith points to the language requiring that the side wall of the raised central band "extend[] between the crown region and the rear region." *Id.* Xenith contends that the word "between" implies that there is a space between the crown region and the rear region that does not belong to either one, but that any such space is not identified in the figures. But this does not make sense even as a matter of plain English—"between . . . and" can simply mean "from . . . to"—and in any event, the patent specification contradicts Xenith's interpretation. The specification describes the raised the central band as "extending across the crown region 39 to the rear region 40." JA17, 6:17; see *id.*, 6:19–20. Further, the specification references figures 1, 1A, 13, 19, and 20, all of which depict the central band as extending throughout the crown region and into the rear region. Thus reading the claims in the context of the specification, this phrase is not invalid as indefinite.

Schutt also argues that this claim language is invalid because the phrase "configured to receive a head of a wearer of the helmet" is indefinite. Schutt contends that heads can come in different shapes and sizes and thus that the patents fail to explain what shell configurations fall within the scope of this claim. But there are many items whose size must vary depending on the wearer, and this fact alone is insufficient to invalidate a patent. The patents disclose the approximate locations of each region on

the shell and which features belong in which region, which is sufficient to make one skilled in the art reasonably certain of how to reproduce the item in various sizes.

The Court concludes that the disputed phrases using the term "region" are not invalid as indefinite.

3. "[E]xtends between the crown region and the rear region"

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
extends between the crown region and the rear region	none	invalid as indefinite	plain and ordinary meaning

In a separate section, Xenith again argues that the phrase "extends between the crown region and the rear region" is invalid as indefinite. Xenith's Br. at 10. In doing so, Xenith merely restates its arguments from the prior section that 1) any phrase using the term "region" is indefinite; and 2) the use of the term "region" combined with the word "between" fails to convey the exact location suggested of this feature. The Court has rejected these arguments, and Schutt does not make any additional arguments regarding this particular phrase. The Court therefore finds that this phrase is not invalid as indefinite.

4. "[W]herein the shell includes three vent openings in each of the first and second plurality of vent openings, wherein a major axis of the second vent opening is substantially parallel to an extent of one of the sidewalls" and other similar phrases

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
wherein the shell includes three vent openings in each of the first and second plurality of vent openings, wherein a major axis of the second vent opening is substantially parallel to an extent of one of the sidewalls	invalid as indefinite, lacking written description, and / or non-enabled	none	plain and ordinary meaning

Schutt argues that, because the terms "major axis" and "substantially parallel to

an extent of one of the sidewalls" do not appear in the specification, there are "infinite possibilities" for interpreting the relationship between the vent openings and the sidewall and thus the phrase is indefinite. Schutt's Br. at 25. In response, Riddell contends that a person skilled in the relevant art would understand the ordinary meaning of these phrases with reasonable certainty.

The Court agrees with Riddell. As Riddell explained at the hearing, a person skilled in the relevant art would understand, to a reasonable certainty, that the term "major axis" refers to the longer axis of the vent hole. Thus the remainder of the phrase would be reasonably understood as describing an embodiment wherein the long axis of the vent hole runs substantially parallel to an extent of the sidewall. Riddell further explained at the hearing that the patent uses the phrase "substantially parallel" to indicate that the vent holes may be a few degrees off from parallel, a meaning that is clearly conveyed by the quoted phrase. At the hearing, Schutt chose to stand on its briefs, in which it indicated only that the claim language does not provide any limitation for what constitutes "substantially parallel" or "an extent" of the sidewall. Schutt's Br. at 25. The Court finds that one skilled in the relevant art would understand the phrase "substantially parallel" with reasonable certainty in accordance with the explanation Riddell offered at the hearing. And the patent's failure to provide a particular length for "an extent" of the sidewall does not render the phrase indefinite, as a person skilled in the relevant art would be able to determine whether the long axis of the vent opening lies substantially parallel to some portion of the sidewall. The Court therefore concludes that the phrase is not indefinite.

5. "[Inflation valve] is aligned with an opening in the [raised central band]" and other similar phrases

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
inflation valve is aligned with an opening in the raised central band	invalid as indefinite, lacking written description, and / or non-enabled	none	plain and ordinary meaning

Schutt next argues that the phrase "inflation valve is aligned with an opening in the raised central band"—used multiple times throughout the '818 patent—is invalid as indefinite. See e.g., JA744, 15:47–50 ("The football helmet of claim 9, wherein the crown shock absorbing pad is inflatable and includes an inflation valve, and wherein the inflation valve is aligned with an opening in the raised central band."); JA745, 18:65–67 ("the crown pad assembly including an inflation valve aligned with an inflation opening in the central band"). The specification states that the crown shock absorbing pad preferably "includes an inflation valve 201 which is aligned and received within an opening (not shown) formed in the crown 39 of shell 31 . . . which permits crown shock absorbing pad 200 to be inflated." JA743, 14:6–10. Schutt argues that this language fails to teach the relationship between the inflation valve and the inflation opening.

The Court disagrees. As Riddell explained at the claim construction hearing, the plain and ordinary meaning of the language is that the inflation valve must line up with an opening in the raised central band so that someone can use the valve to inflate the pad inside the helmet. Figure 13 depicts this arrangement between the inflation valve (marked as 201), the inflatable pad (marked as 200), and the raised central band.

JA731; JA738, 4:28–30. The figure demonstrates that the pad lies within the shell and that the inflation valve on the pad lines up with a hole in the shell so that it protrudes from the raised central band to the exterior of the helmet. When taken together, the claim language, specification, and figures sufficiently disclose this relationship between

the inflation valve and the inflation opening. The Court concludes that this phrase is not indefinite.

6. "[C]urvilinear configuration"

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
curvilinear configuration	none	invalid as indefinite	plain and ordinary meaning

The phrase "curvilinear configuration" is used in the '818 patent to describe one embodiment of the sidewalls of the raised central band. For example, claim 44 discloses "[t]he football helmet of claim 43, wherein each sidewall has a curvilinear configuration as it extends between the crown region and the rear region of the shell." JA745, 18:47–49. Xenith argues that this phrase can be interpreted to mean either "1) the sidewall curves such that if the opposing sidewalls mirror each other, the width of the raised central band will increase or decrease over a given area; or 2) the sidewall extends upwards from a surface of the shell in a curved manner, rather than a straight line." Xenith's Br. at 16. Without further argument, Xenith states that neither the claim language nor the specification reveals which of these two meanings the patent discloses and therefore the phrase is indefinite.

Riddell appears to concede that the definition of this phrase is limited to a configuration in which the sidewalls curves as it extends between the crown region and the rear region—i.e. a curvature in the horizontal plane. Riddell approvingly cites an image highlighted by the Patent Trial and Appeal Board, which indicates that the wall curves as it crosses the shell. Pl.'s Resp. to Xenith at 24–25. Further, Riddell states in a footnote that "even if the claim were read to *also* include vertical curvature, that does not somehow render the claim indefinite." Pl.'s Resp. to Xenith at 25 n.16. Thus Riddell

agrees that the definition is one of curvature in a horizontal plane.

Further, this phrase is not indefinite. The definition is supported by the claim language itself, which indicates that the sidewall "has a curvilinear configuration as it extends between the crown region and the rear region of the shell," JA21, 14:45–47 (emphasis added), suggesting that the walls curve as they approach the rear region of the shell. It is also supported by the patent's figures, such as figure 19, which show the raised central band widening—and the sidewalls curving—as it approaches the rear region of the helmet. Thus a person skilled in the relevant art would understand to a reasonable certainty that this language describes walls that curve in the horizontal plane as they extend from the front to the rear of the shell. The Court therefore concludes that the phrase is not indefinite.

E. "Actuation force"

Disputed Term or Phrase	Schutt's Proposal	Xenith's Proposal	Riddell's Proposal
actuation force	a force that lacks a rotational component	none	a force that disconnects the coupler mechanism (which facilitates quick removal of a face guard relative to a conventional threaded connector)

The phrase "actuation force" is used in the '269 patent to describe the mechanism by which the faceguard is disconnected from the helmet. Riddell does not contend that Xenith is infringing the '269 patent, and thus Xenith does not offer any construction of this phrase. Schutt argues that both the specification and the prosecution history of the patent demonstrate that the patentees disavowed any definition of this term that includes a rotational component.

Ordinarily claims are construed as having the plain meaning that would be evident to a person of ordinary skill in the art at the time of the invention. *Comput.*

Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1373. And as discussed previously, the doctrine of claim differentiation creates a rebuttable presumption that a limitation expressly indicated in one claim should not be imputed into other claims that do not contain the limitation. This presumption applies here. Claim 1 discloses a sports helmet with a detachable faceguard "wherein the actuation force is applied to the coupler mechanism." JA2095. Claim 2 discloses "[t]he sports helmet of claim 1, wherein the application of the actuation force lacks a rotational component." *Id.* Thus there is a rebuttable presumption that claim 1—and others like it—discloses an actuation force that can include a rotational component.

But a court must construe claims in light of both the specification and the prosecution history. And in this case, both the specification and the prosecution history support a conclusion that actuation force is limited to a force that lacks a rotational component.

1. Specification

Although courts avoid importing limitations from the specification into the claims, explanations in the specification may lead one of ordinary skill in the art to interpret a claim term more narrowly than its plain meaning otherwise suggests. *Comput. Docking*, 519 F.3d at 1374. This is particularly true in light of the fact that the specification is the "single best guide to the meaning of a disputed term." *Id.* Here, Schutt repeatedly defined the term "actuation force" as a force that lacks a rotational component. In the abstract, the patent describes the "present invention" as an "improved sports helmet including a quick release connector assembly for the faceguard" and indicates that the removable faceguard operates when an "inwardly directed actuation force that lacks a

rotational component is applied to the elongated pin." JA2080. This type of statement, in the preamble section of a patent, can limit the scope of the claim when the feature is "a necessary and defining aspect of the invention." *Comput. Docking*, 519 F.3d at 1375.

Additional statements from the specification indicate that this lack of a rotational component is, in fact, a defining aspect of the invention. In the section labeled "Technical Field," the patent states specifically that "[t]he invention relates to a protective helmet . . . having a faceguard and a quick release connector that allows for rapid disconnection of the faceguard from the helmet shell by the application of an inwardly directed force, without rotation of the object applying the force." JA2091, 1:19–24 (emphasis added). This language suggests that a necessary aspect of the invention is that rotation is not required in order to separate the faceguard from the shell.

The background section further emphasizes that this is one of the advantages of the '269 patent. The patent states that, in other helmets, "adjusting and / or removing the faceguard from the shell can be difficult and time consuming" because "rotation of a flat-blade or Phillips screwdriver is required to loosen the fastener." *Id*, 1:63–2:2. The background section concludes by stating that "[t]he present invention is provided to solve these limitations." *Id*. 2:41. In doing so, the specification indicates that the lack of a rotational force component is a key feature of the design claimed by the patent. *See Watts v. XL Sys., Inc.*, 232 F.3d 877, 883 (Fed. Cir. 2000) (finding that specification supplies a limitation where it describes the limitation as part of "the present invention" and never discusses embodiments that do not include the limitation). Other references in the specification imply—albeit do not definitively state—that the claimed actuation

force lacks a rotational component and that this is a defining feature of the invention. See JA2092, 4:42–46 (indicating that the releasable coupler mechanism provides for rapid detachment "without the deliberate and time-consuming use of a screwdriver"); JA2093, 6:56–57 ("The actuation force F is applied substantially perpendicular or normal to the outer surface of the helmet shell.").

The specification also devotes a separate paragraph to the actuation force itself, in which it again emphasizes the lack of rotational component as the advantage of this invention: "Unlike conventional faceguard connectors that employ a threaded fastener (or screw) which requires rotation for loosening and removal, the actuation force F does not include a rotational component. Thus, the actuation force F lacks the time-consuming rotational component and provides a more efficient disconnection process." JA2094, 7:1–7. With these statements, the '269 patent thus appears to "distinguish[] or disparage[] prior art based on the" limitation in question (the lack of a rotational component) supporting defendants' contention that the patentees narrowed the actuation force to a force that lacks a rotational component. *Poly-America, L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016).

2. Prosecution history

Any doubt regarding whether the patentees disavowed this claim scope that remains after reading the specification is eliminated by looking at the prosecution history. During prosecution of the '269 patent, the PTO rejected some claims as being anticipated by prior art known as the Ide reference. The PTO found that the Ide reference discloses a protective sports helmet with a faceguard connector assembly and a similar releasable coupler mechanism. JA2170–71. The examiner indicated that

although Ide does not disclose an inwardly directed actuation force, "it is well known in the helmet art that different connection or fastening mechanisms can be used" and that a separate piece of prior art—the Goodhand reference—discloses a sports helmet with an attachable shield that is released by an actuation force. JA2171–72. In a subsequent interview with the patentees, the examiner indicated that the inwardly directed actuation force in the '269 patent "is not specific to the quick release ball/detent coupler mechanism shown in the Applicant's Figures, and that a screwdriver unscrewing the screw in the Ide reference would embrace the aforementioned structural limitations." JA2219. The examiner thus rejected the claims because prior art disclosed detaching parts of a sports helmet with an inwardly directed force.

The PTO summarized a subsequent interview with the patentees as follows:

Examiner Yoon and SPE Welch noted that the recited "inwardly directed actuation force" in independent claim 1 and the "'actuation force being applied substantially perpendicular to the bracket" in independent claim 8 is not specific to the quick release ball / detent coupler mechanism shown in the Applicant's Figures, and that a screwdriver unscrewing the screw in the Ide reference would embrace the aforementioned structural limitations. [The patentees' attorney] argued that the limitation provided in dependent claim 9, "the application of the actuation force lacks a rotational component" would overcome the Ide reference release mechanism.

JA2219. By arguing that the limitation regarding lack of rotational component was sufficient to overcome the Ide reference, the patentees expressly distinguished prior art on the basis of this feature and disavowed embodiments that lack this feature. See Comput. Docking, 519 F.3d at 1375. Riddell argued at the hearing that this statement was meant only to distinguish claim 9 in the application—now claim 2 in the patent—which expressly states that the actuation force lacks a rotational component and therefore that it does not narrow the scope of the other claims. But the examiner had also expressly rejected those other claims in light of the Ide and Goodhand references.

JA2170–71, 73–75. Thus the patentees were required to distinguish these claims from Ide in order to overcome rejection. And in reading the interview summary in its entirety, it is clear that the PTO examiners indicated that the structural limitations in claims 1 and 8 were disclosed in the Ide reference and that the patentees overcame this objection by pointing to the limitation expressed in claim 9. Riddell cannot now avoid this disavowal of claim scope by arguing that the patentees did not intend this statement to apply to the other claims that the PTO initially rejected as disclosed by the Ide reference in light of the Goodhand reference.

Not only did the patentees argue during prosecution that prior art did not disclose a force that lacked a rotational component, but they also argued that this disclosure is part of what defines the '269 patent. The patentees stated that one skilled in the art of designing protective sports equipment would recognize "that the inwardly directed actuation force required by the ['269 patent] is distinct from the rotational engagement and disengagement disclosed by Ide." JA2235. The patentees thus expressly defined their invention as including the limitation that Schutt now seeks to include in the construction of this phrase. See Shire Dev., LLC v. Watson Pharm., Inc., 787 F.3d 1359, 1366 (Fed. Cir. 2015). Also, Thad Ide, one of the inventors of the '269 patent, submitted a declaration to the PTO in support of the '269 application in which he described a "long felt need in the industry" for rapid attachment and / or detachment of a faceguard to the helmet "both without the time-consuming rotation of a threaded fastener." JA2250. In sum, the prosecution history clearly indicates that the patentees disavowed any scope of the phrase "actuation force" that extends beyond "a force that lacks a rotational component."

At the hearing, Riddell pointed to another spot in the prosecution history, in which the examiner, in stating the reasons for allowance of the disputed claims, indicated that the actuation force is applied inwardly and did not mention that the force lacked a rotational component. JA2514. But in doing so, the examiner was evaluating a separate objection, one based on the combination of the Ide reference and another reference referred to as the Kitzis reference. See JA2484. Therefore the fact that the examiner did not focus on the lack of rotational component when distinguishing the '269 patent from prior art in this instance does not render irrelevant the examiner's prior distinction from the Ide and Goodhand references based on a rotational component.

Riddell argues that both the language of the patent and the prosecution history make it clear that the patentees were distinguishing their invention from "conventional connectors that employed threaded screws." Pl.'s Resp. to Schutt at 21. Riddell contends essentially that there has been no clear disavowal of claim scope and therefore that Schutt's proposed construction cannot apply. But, as Schutt argues, Riddell's own proposed construction seems inadequate. The proposed construction—
"a force that disconnects the coupler mechanism (which facilitates quick removal of a face guard relative to a conventional threaded connector)"—seems to lay claim to all mechanisms that function more quickly than a conventional threaded connector, even, for example, an unconventional threaded connector that can be disconnected faster.
This is plainly not the appropriate scope of the claim language, as Riddell acknowledges at a minimum that the language does not cover threaded connectors.

3. Conclusion

The Court concludes that, during prosecution, the patentees narrowed the term

"actuation force" to cover only a force that lacks a rotational component. This

construction is supported by the patentees' repeated references in the patent

specification to a lack of rotational component. All told, there is evidence sufficient to

overcome the presumption created by claim differentiation.

Conclusion

The disputed claim terms are construed in accordance with the conclusions set

forth in this Memorandum Opinion and Order. The cases are set for a telephone status

hearing on May 31, 2017 at 8:30 a.m. to discuss the remainder of the pretrial schedule

in the case. Counsel are to jointly initiate the call to chambers.

United States District Judge

Date: May 24, 2017