

**UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA**

POLARIS INDUSTRIES INC.,

Civil Nos. 15-4129, 15-4475 (JRT/TNL)

Plaintiff,

v.

**MEMORANDUM
OPINION AND ORDER
CONSTRUING CLAIM TERMS**

ARCTIC CAT INC. and ARCTIC CAT
SALES INC.,

Defendants.

William F. Bullard and Dennis C. Bremer, **CARLSON CASPERS VANDENBURGH LINDQUIST & SCHUMAN PA**, 225 South Sixth Street, Suite 4200, Minneapolis, MN 55402, for plaintiff.

John C. Adkisson, Joseph A. Herriges, and Conrad A. Gosen, **FISH & RICHARDSON PC**, 60 South Sixth Street, Suite 3200, Minneapolis, MN 55402, for defendants.

Plaintiff Polaris Industries Inc. (“Polaris”) and Defendants Arctic Cat Inc. and Arctic Cat Sales Inc. (collectively “Arctic Cat”) manufacture off-road vehicles. Polaris brought these patent infringement actions against Arctic Cat, alleging Arctic Cat infringed its U.S. Patent No. 8,944,449 (“’449 Patent”) and U.S. Patent No. 9,217,501 (“’501 Patent”). The parties now move the Court to construe disputed claim terms. For the reasons set forth below, the Court will construe the disputed claim terms as follows:

Term	Construction
<u>’449 Patent</u> [Claim 1] “the middle portion is positioned rearward of a rear end of the frame”	“the middle of the sway bar is rearward of the rear end of the frame where the middle portion is positioned on the frame”

Term	Construction
<u>'449 Patent</u> [Claim 1] “spaced apart from an interior region of the generally U-shaped sway bar”	“when viewed from above, located outside an area defined by the interior region of the generally U-shaped sway bar”
<u>'501 Patent</u> [Claims 1, 10] “communicate ambient air to an interior of” the CVT unit or engine	Plain and ordinary meaning
<u>'501 Patent</u> [Claim 11] “a center of gravity of the vehicle”	Plain and ordinary meaning

BACKGROUND

This series of patent cases arises from the entry of Arctic Cat into the market for 4x4 Trail Recreational Off-Road Vehicles (“4x4 Trail ROV”). Prior to 2013, Polaris had 90 percent market share in the 4x4 Trail ROV market. *Polaris Indus. Inc. v. Arctic Cat Inc.*, No. 15-4475, 2017 WL 1180426, at *1 (D. Minn. Mar. 29, 2017). In 2013, Arctic Cat introduced a competing product – the Wildcat Trail – which allegedly reduced Polaris’s market share by 10 percent. *Id.*

In response, between 2013 and 2015, Polaris filed five separate patent infringement cases against Arctic Cat. *Id.* In February 2015 and January 2017, the Patent Trial and Appeal Board found the patents relied upon in the first three cases to be invalid. *Id.* at *2-3. The fourth case (No. 15-4129), filed November 16, 2015, alleges certain Arctic Cat vehicles infringe the ’449 Patent. *Id.* at *2. The fifth case (No. 15-4475), filed December 22, 2015, alleges Arctic Cat’s Wildcat Trail infringes the ’501 Patent – which Polaris obtained through an accelerated process. *Id.*

On February 10, 2017, the parties filed a Joint Claim Construction Statement agreeing “that the terms of the patents-in-suit other than those identified . . . should be given their plain and ordinary meaning consistent with Federal Circuit Law.” (Joint Claim Construction Statement (“J. Claim Constr.”) at 2, Feb. 10, 2017, Docket No. 109.) The parties also offered six phrases where “the parties offer[ed] competing proposals.” (*Id.* at 2 & Exs. A-B.) During the course of briefing for the claim construction hearing, Arctic Cat withdrew its proposed construction for the phrase “supported by the plurality of ground engaging members.” (Decl. of Shelleaha L. Jonas (“Jonas Decl.”), Ex. W at 619,¹ Mar. 31, 2017, Docket No. 138.) The parties further agreed on a construction of the phrase “means for rotatably coupling the sway bar to the frame” before filing their response briefs. (Polaris’s Reply Claim Construction Br. at 25, Apr. 21, 2017, Docket No. 149; *see also* Suppl. Joint Claim Construction Statement (“Suppl. J. Claim Constr.”) at 1-2, May 19, 2017, Docket No. 167 (memorializing agreement to claim terms).) The Court is left the construing four phrases within the ’449 Patent and ’501 Patents.

I. ’449 PATENT

The parties ask the Court to construe Claim 1 in the ’449 Patent. Claim 1 of the ’449 Patent, in relevant part, states:

A vehicle, comprising: . . . a generally U-shaped sway bar having a first end portion coupled to the first suspension, a second end portion coupled to the second suspension, and a middle portion supported by the frame, the first end portion and the second end portion are longitudinally positioned between the seating and the middle portion, the generally U-shaped sway bar being rotatably coupled to the frame and the middle portion is a

¹ All citations to the Jonas Declaration refer to Appendix page numbers.

continuous section which extends across a central longitudinal plane of the vehicle and **the middle portion is positioned rearward of a rear end of the frame**, wherein the first shock and the second shock are **spaced apart from an interior region of the generally U-shaped sway bar**.

(Decl. of Joseph A. Herriges in Supp. of Arctic Cat’s Opening Claim Construction Br. (“Herriges Decl.”), Ex. A (“’449 Patent”) at 44, Mar. 31, 2017, Docket No. 137 (emphasis added).)²

Within Claim 1, the parties ask the Court to construe two different phrases: (1) “the middle portion is positioned rearward of a rear end of the frame”; and (2) “spaced apart from an interior region of the generally U-shaped sway bar.” (See J. Claim Constr., Ex. A at 7-10; *id.*, Ex. B at 4-6; *see also* Suppl. J. Claim Constr. at 2-3.)

II. ’501 PATENT

The parties also ask the Court to construe Claim 1, Claim 10, and Claim 11 in the ’501 Patent. Claim 1 sets forth, in relevant part:

A vehicle, comprising: . . . an air intake system operatively coupled to the CVT unit **to communicate ambient air to an interior of the CVT unit**, the air intake system receiving ambient air through an inlet in a portion of the plurality of exterior body panels, the inlet in the portion of the plurality of exterior body panels being located rearward of the first wheel of the first ground engaging member and forward of the second wheel of the second ground engaging member and located laterally outside of a lateral extent of the power source and the CVT unit.

(Herriges Decl., Ex. B (“’501 Patent”) at 111 (emphasis added).) Claim 10 states:

The vehicle of claim 9, further comprising: a second air intake system operatively coupled to the internal combustion **engine to communicate ambient air to the internal combustion engine** for combustion of the fuel, the second air intake system including a second air inlet in the plurality of

² Unless otherwise indicated, all record citations are to the docket of Case No. 15-4475.

exterior body panels through which ambient air enters the second air intake system, the second air intake system includes an airbox located rearward of the drive member of the CVT unit and below the cargo carrying portion, the airbox includes a base portion and a cover, the cover of the airbox is located rearward of the base portion of the airbox, a filter is positioned in an interior of the airbox, the cover is removably coupled to the base portion to permit access to the filter.

(*Id.* (emphasis added).) And Claim 11 provides:

The vehicle of claim 10, wherein the air inlet and the second air inlet are located rearward of **a center of gravity of the vehicle.**

(*Id.* at 112 (emphasis added).)

Within Claim 1, Claim 10, and Claim 11, the parties ask the Court to construe two phrases: (1) “to communicate ambient air”; and (2) “a center of gravity of the vehicle.” (See J. Claim Constr., Ex. A at 1-2, 5-6; *id.*, Ex. B at 1, 3; see also Supp. J. Claim Constr. at 2.)

DISCUSSION

I. CLAIM CONSTRUCTION PRINCIPLES

Claim construction is a question of law for the Court. *Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1344 (Fed. Cir. 2002). “The purpose of claim construction is to determine the meaning and scope of the patent claims that the plaintiff alleges have been infringed.” *Every Penny Counts, Inc. v. Am. Express Co.*, 563 F.3d 1378, 1381 (Fed. Cir. 2009). Claim terms are given their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). To ascertain this meaning and define the scope of the invention, courts look to the words of the claims themselves, the

specification, and the prosecution history of the patent. *Id.* at 1314; *see also Masco Corp. v. United States*, 303 F.3d 1316, 1324 (Fed. Cir. 2002); *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-83 (Fed. Cir. 1996).

“[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Phillips*, 415 F.3d at 1314. The context of the surrounding words of the claim term may be instructive on the ordinary and customary meaning of the term. *Id.* Courts also consider “[o]ther claims of the patent in question, both asserted and unasserted,” to determine the ordinary and customary meaning of a claim term. *Id.* “Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Id.* Differences in the claim language can also be a useful guide, and “‘different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope.’” *Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1368 (Fed. Cir. 2005) (quoting *Karlin Tech. Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999)).

Claims do not stand alone, but are part of “a fully integrated written instrument,” which includes the specification. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978 (Fed. Cir. 1995). The specification is the single best guide to the meaning of a disputed term, and “claims ‘must be read in view of the specification, of which they are a part.’” *Phillips*, 415 F.3d at 1315 (quoting *Markman*, 52 F.3d at 979); *see also Vitronics*, 90 F.3d at 1582 (“[T]he 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.”). Courts, however, will not import a limitation from the specification into the claims. *Phillips*, 415 F.3d at 1320. The Federal Circuit has “repeatedly warned against confining the claims to . . . embodiments” described in the specification. *Id.* at 1323; *cf. id.* (holding that the Federal Circuit has “expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.”).

In addition to considering the specification, the Court may also consider the patent’s prosecution history, which is considered “intrinsic evidence.” *Id.* at 1317. The prosecution history “consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.” *Id.* The prosecution history, however, “often lacks the clarity of the specification and thus is less useful for claim construction purposes.” *Id.* But the prosecution history may still “inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

Although intrinsic evidence is of primary importance in construing a patent’s claim terms, the Court may also rely on extrinsic evidence, which consists of “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. Extrinsic evidence is less significant than intrinsic evidence in construing claim terms, and extrinsic evidence cannot establish a meaning of the claim term that is at odds with the intrinsic evidence. *Phillips*, 415 F.3d at 1317-18.

In construing claims, the Court avoids adding extraneous limitations, “that is, limitations added ‘wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim.’” *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 950 (Fed. Cir. 1993) (quoting *E.I. Du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988)). “[T]here must be a textual reference in the actual language of the claim with which to associate a proffered claim construction.” *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 990 (Fed. Cir. 1999); *see also McCarty v. Lehigh Val. R. Co.*, 160 U.S. 110, 116 (1895) (“[I]f we once begin to include elements not mentioned in the claim, in order to limit such claim . . . , we should never know where to stop.”).

The Court is not “required to construe every limitation present in a patent’s asserted claims.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (emphasis omitted). The Court may decline to adopt a construction because the disputed claim term has a plain and ordinary meaning, if that determination resolves the parties’ dispute. *See, e.g., Caddy Prods., Inc. v. Am. Seating Co.*, No. 05-800, 2008 WL 2447294, at *2 (D. Minn. June 13, 2008).

II. CLAIM CONSTRUCTION

A. “[T]he middle portion is positioned rearward of a rear end of the frame” (’449 Patent)

The parties first dispute the meaning of the claim term “the middle portion is positioned rearward of a rear end of the frame.” (’449 Patent at 44.) Polaris proposes the claim should be construed as: “the middle portion is positioned rearward of (i.e., behind)

the back of the frame.” (See Suppl. J. Claim Constr. at 2.) Alternatively, Polaris submits the phrase should be given its plain and ordinary meaning. (*Id.*) Arctic Cat proposes the claim should be construed as: “the middle portion is positioned rearward of a rearwardmost point of the frame.” (*Id.* at 2.) For the reasons set forth below, the Court will construe the phrase to mean: **“the middle of the sway bar is rearward of the rear end of the frame where the middle portion is positioned on the frame.”**

1. Disclaimed Coverage

Arctic Cat first argues Polaris disclaimed its interpretation of the claim language. Prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). “[F]or prosecution disclaimer to attach, [the Federal Circuit] requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable.” *Id.* at 1325-26. “Thus, when the patentee unequivocally and unambiguously disavows a certain meaning to obtain a patent, the doctrine of prosecution history disclaimer narrows the meaning of the claim consistent with the scope of the claim surrendered.” *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013). “Such disclaimer can occur through amendment or argument.” *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1359 (Fed. Cir. 2017). And the prosecution history “includes all express representations made by or on behalf of the applicant to the examiner to induce a patent

grant . . . includ[ing] amendments to the claims and arguments made to convince the examiner.” *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985).

Prosecution disclaimer is “a fundamental precept in . . . claim construction jurisprudence,” which “promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Omega Eng’g, Inc.*, 334 F.3d at 1323-24. Ultimately, the doctrine of prosecution disclaimer ensures that claims are not “construed one way in order to obtain their allowance and in a different way against accused infringers.” *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

Here, Arctic Cat argues that by amending its claim during prosecution to omit the language “at first height,” Polaris limited its claims to vehicles that have a sway bar rearward of the rear end of the frame at every height. Arctic Cat’s argument relies on the following amendment to Claim 1:

~~a rear drive unit supported by the frame, the rear drive unit operatively coupling the first ground engaging member to the CVT; and~~

a generally U-shaped sway bar having a first end portion coupled to the first suspension member, a second end portion coupled to [[and]] the second suspension member, the sway bar, and a middle portion supported by the frame, the generally U-shaped sway bar being rotatably coupled to the frame and the middle portion is a continuous section which extends across a central longitudinal plane of the vehicle and having a rear portion and the middle portion is positioned rearward of a rear end of the frame, wherein the first shock and the second shock are spaced apart from an interior region of a generally U-shaped sway bar at first height, the first height being completely above the rear drive unit.

(Herriges Decl., Ex. C at 126-27 (emphasis added).)

Arctic Cat’s argument boils down to whether Polaris’s decision to strike the words “at first height” acts as a limitation on Polaris’s claim regarding the “rear end of the frame” and cannot – as argued by Arctic Cat – broaden the scope of what was allowed under the previous version. Whether Polaris’s omission of the words “at first height” limits or broadens Claim 1 depends on the reason Polaris omitted the language. If Polaris omitted the “at first height” language in response to a rejection based on the language, then the omission may act as a limitation. *See United Video Props., Inc. v. Amazon.com, Inc.*, 561 F. App’x 914, 917-18 (Fed. Cir. 2014) (purposely omitting “Internet delivered data” to “secure its patent”); *Taylor v. Daimler Chrysler AG*, 313 F. Supp. 2d 703, 708 (E.D. Mich. 2004) (noting “the examiner rejected Taylor’s claim with the ‘translucent portion’ language but allowed the claim when Taylor more narrowly described the ‘translucent housing’”), *aff’d*, 124 F. App’x 661 (Fed. Cir. 2005). On the other hand, where limiting language is eliminated in the course of prosecution history, but the omission was not the crux of the patent approval, the Court should not read the omission as a limitation. *See 3M Innovative Props. Co. v. Louis M. Gerson Co.*, No. 08-4960, 2010 WL 4106712, at *7 (D. Minn. Oct. 12, 2010) (“[P]rosecution history represents an ongoing negotiation between the [USPTO] and the applicant, rather than the final product of that negotiation” (quoting *Phillips*, 415 F.3d at 1317)).

Here, the Court already indicated its view that the “at first height” language was omitted as part of a general rewrite of the claim – not a direct response to rejection. The Court stated “[t]he initial claim was about the ‘rear portion’ of the sway bar, not the ‘middle portion,’ and the initial claim used ‘at a first height’ to relate the sway bar to

other components ('rear drive unit'), not the frame.” *Polaris Indus. Inc.*, 2017 WL 1180426, at *7. Thus, the “at first height” omission was part of the ongoing negotiation with the patent office, as opposed to an omission required to obtain the patent. Further, other than the fact that the language was omitted after multiple claim rejections, Arctic Cat does not point to any statement from the patent office indicating the “at first height” limitation was the phrase that needed to be changed to secure the patent.

For these reasons, the Court finds Polaris did not expressly disclaim its current construction.

2. Claim Language

Moving to the claim language, Arctic Cat argues the plain language of the claim supports its interpretation that “rear end” means “rearwardmost point.” In contrast, Polaris argues the Court already decided the language is ambiguous and, therefore, the Court should look to extrinsic sources.

The Court already indicated its view “that there is room for reasonable disagreement on the exact construction” of this claim language. *Polaris Indus. Inc.*, 2017 WL 1180426, at *7. While this statement does not preclude a plain language argument, the parties’ dispute highlights two competing interpretations of the phrase “rear end” and the Court finds further construction is necessary to resolve the parties’ dispute. *See Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1382 (Fed. Cir. 2008).

3. *Specification*

Arctic Cat briefly argues the specification in the '449 Patent supports its interpretation of "rear end" as "rearwardmost point." Arctic Cat correctly points out that the "at a first height" language was not removed from the specification. (*See* '449 Patent at 42.) According to Arctic Cat, this is evidence that "at first height" is broader than the language in the claim itself and, therefore, a person of ordinary skill in the art would understand the claim is narrower and requires the middle portion of the sway bar to be behind the rearwardmost point on the frame. Polaris rebuts Arctic Cat's argument, asserting that the specification refers to a specific point and the absence of the "at first height" language shows that the claim is broader. For the reasons set forth above, the Court finds the specification shows that the claim is broader than the previous permutation requiring "at first height."

Polaris makes its own argument regarding the specification. Polaris points out that the specification directs one of skill to review Figure 5 in the '449 Patent to see a sway bar "positioned rearward of a rear end of the frame." (*Id.* at 42.) Figure 5 is an image of the vehicle from behind. (*Id.* at 8.) According to Polaris, this shows "rear end" does not mean "rearwardmost point" because from the perspective of Figure 5 one cannot see where the rearwardmost point of the entire frame is. Instead, one can see the sway bar positioned behind the frame at the point where it is connected.

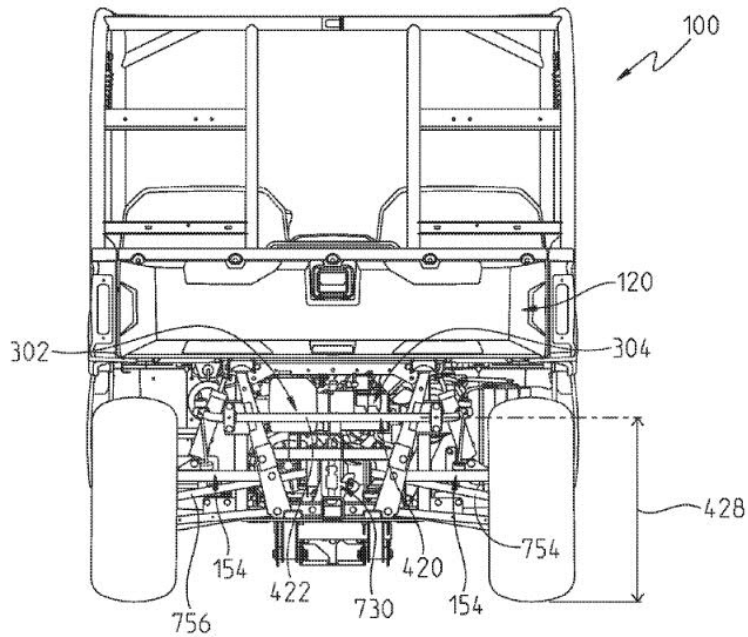


FIG. 5

(*Id.*)

The reference to Figure 5 does provide some evidence that “rear end” does not mean “rearwardmost point.” But Figure 5 also highlights an issue with Polaris’s current construction. Specifically, Polaris previously argued to this Court that the “most obvious interpretation” of the disputed clause was “[t]he middle of the sway bar must be rearward of the rear end of the frame where the middle portion is ‘positioned’ on the frame.” (Polaris’s Am. Mem. in Supp. of Mot. to Dismiss Arctic Cat’s Countercl. at 30, Mar. 18, 2016, Docket No. 39.) To support this interpretation, Polaris directed the Court to look at Figure 5 which showed “the sway bar . . . rearward of a rear end at a particular height – the height where it is *positioned*.” (*Id.* at 32.) The Court specifically relied on Polaris’s

construction, noting that “Figure 5 appears to support Polaris’s position because it shows the middle portion of the sway bar is rearward of the rear end **where it is positioned.**” *Polaris Indus. Inc.*, 2017 WL 1180426, at *7 (emphasis added). Now, Polaris asks the Court to interpret the phrase more broadly: “the middle portion is positioned rearward of (i.e., behind) the back of the frame.” (Suppl. J. Claim Constr. at 2.) Polaris’s construction does not mention that it must be rearward “where it is positioned.” This presents at least some evidence that the construction put forth by Polaris is vague and does not encompass all of the parameters required for a person of skill to understand the claim.

4. Other Evidence

Finally, Polaris points to significant, unrebutted evidence that “rear end” means “back” not “rearwardmost point.” Polaris cites numerous dictionaries that define “rear end” as the “back” or the “back part” of something. (*See* Jonas Decl., Ex. N at 321, 329, 364, 381.) Polaris also cites prior art that identified “rear end” as generally referring to the back end of the vehicle. (*See* Polaris’s Opening Claim Construction Br. at 30-31, Mar. 31, 2017, Docket No. 139.) Such evidence certainly supports Polaris’s position that “rear end” means “back” and not “rearwardmost point.”

5. Conclusion

Because the specification and other evidence counter against Arctic Cat’s interpretation of “rear end” as “rearwardmost point,” the Court will not adopt Arctic

Cat's construction.³ But, contrary to Polaris's previous representations regarding the claim term, Polaris's construction fails to mention that the sway bar must be rearward "where it is positioned." Thus, the Court will construct the claim term using the previous claim construction provided by Polaris: "The **middle of the sway bar must be rearward of the rear end of the frame where the middle portion is 'positioned' on the frame.**" This construction is supported by Figure 5, the specification, and other evidence.

B. "[S]paced apart from an interior region of the generally U-shaped sway bar" ('449 Patent)

The parties also dispute the meaning of the claim term "spaced apart from an interior region of the generally U-shaped sway bar." ('449 Patent at 44.) Polaris proposes the Court give the term a plain and ordinary meaning construction⁴ or, alternatively, the Court construe the phrase to mean "[the first shock and the second shock] do not pass through the interior region of the generally U-shaped sway bar." (J. Claim Constr., Ex. A at 9.) Arctic Cat seeks to construe the claim to mean "when viewed from above, located outside an area defined by the interior region of the generally u-shaped sway bar." (*Id.*, Ex. B at 5.) Ultimately, the parties dispute whether "spaced

³ At the hearing, Arctic Cat handed the Court a "Notice of Allowance" to support its interpretation "the middle portion is positioned rearward of a rear end of the frame." (*See* Claim Construction Hr'g Tr. at 33:25-34:17, July 28, 2017, Docket No. 177.) Arctic Cat never identified the document as an exhibit and, therefore, the Court does not consider the document in its analysis of the claim. (*See id.* at 36:23-37:2 (asking the Court's permission to submit a letter brief if it was "going to entertain" consideration of the document).)

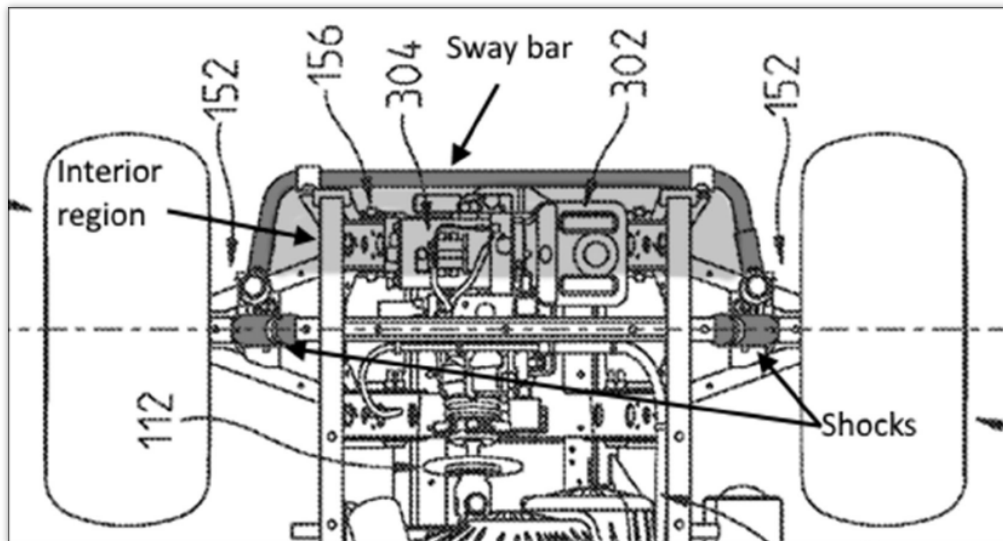
⁴ Both parties briefly argue the language of the claim is plain on its face. But, as shown by the significant briefing on this issue, some form of construction is necessary to resolve the parties' dispute over the meaning of the term. *See Caddy Prods.*, 2008 WL 2447294, at *2.

apart” means “do[es] not pass through the interior region” or “located outside an area defined by the interior region” when “viewed from above.”

1. Specification

Arctic Cat relies heavily on the specification to support its “when viewed from above” construction. As a general rule, the specification is the single best guide to the meaning of a disputed term, and “claims ‘must be read in view of the specification, of which they are a part.’” *Phillips*, 415 F.3d at 1315 (quoting *Markman*, 52 F.3d at 979); *see also Vitronics*, 90 F.3d at 1582 (“[T]he 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.”). But the Court cannot use the specification to import a limitation into the claim. *Phillips*, 415 F.3d at 1320.

Here, Arctic Cat argues that the only language in the specification describing the meaning of “spaced apart from the interior region” points to Figure 20:



(Arctic Cat’s Opening Claim Construction Br. at 17, Mar. 31, 2017, Docket No. 136. (citing ’449 Patent at 23) (providing an example of Figure 20).)

While the specification does not describe the shocks or the shocks being “spaced apart” from the interior region, the specification cites to Figure 20 to define the “interior region.” *Id.* at 41 (“Referring to [Figure] **20**, an interior region . . . of sway bar . . . is indicated.”) Figure 20 depicts the vehicle viewed from above. (’449 Patent at 23.)

While there are certainly circumstances where courts have refrained from importing “viewpoint limitations,”⁵ there are many cases where the construction of a term includes reference to a viewpoint. *Small v. Nobel Biocare USA, LLC*, Nos. 05-3225, 06-683, 2011 WL 3586470, at *11 (S.D.N.Y. Aug. 11, 2011) (adopting construction adding “viewed from above”); *Saso Golf, Inc. v. Nike, Inc.*, No. 08-1110, 2010 WL 4481772, at *5 (N.D. Ill. Nov. 1, 2010) (same). This includes cases where the specification referenced figures with a particular view. *See, e.g., CCPI Inc. v. Am. Premier, Inc.*, 966 F. Supp. 276, 281 (D. Del. 1997) (adding “when viewed from above” in part because of the “preferred embodiments”).

Polaris validly responds that the specification is not to be read to “confine the claims to [the] embodiments” described in the specification. *Phillips*, 415 F.3d at 1323; *cf. id.* (noting that the Federal Circuit has “expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as

⁵ *Krausz Indus. Ltd. v. Smith-Blair, Inc.*, 122 F. Supp. 3d 381, 401 (E.D.N.C. 2015) (rejecting viewpoint limitation because no construction of the term was required); *Warrior Lacrosse, Inc. v. STX, LLC*, No. 04-70363, 2005 WL 1378752, at *7 (E.D. Mich. June 2, 2005) (rejecting a viewpoint limitation because would cause the claim to “contain meaningless surplusage”).

being limited to that embodiment”). But the specification and Figure 20 certainly provide evidence supporting Arctic Cat’s construction that the “interior region” and whether the shocks are “spaced apart from an interior region” can be determined when one views the vehicle from above.

The specification also undermines Polaris’s proposed construction. The specification uses the phrase “spaced apart” to describe various aspects of the vehicle in the ’449 Patent. In each of those occasions, Polaris’s proposed “do[es] not pass through” construction would not make sense. (*See* ’449 Patent at 42 (describing that a console is “spaced apart from a top horizontal plane of seat bottom portion”); *id.* at 43 (stating “hydraulic lines spaced apart from heat sources”).) In each of these instances, the term “spaced apart” plainly means “separated from” or “does not touch” as opposed to “do[es] not pass through.”

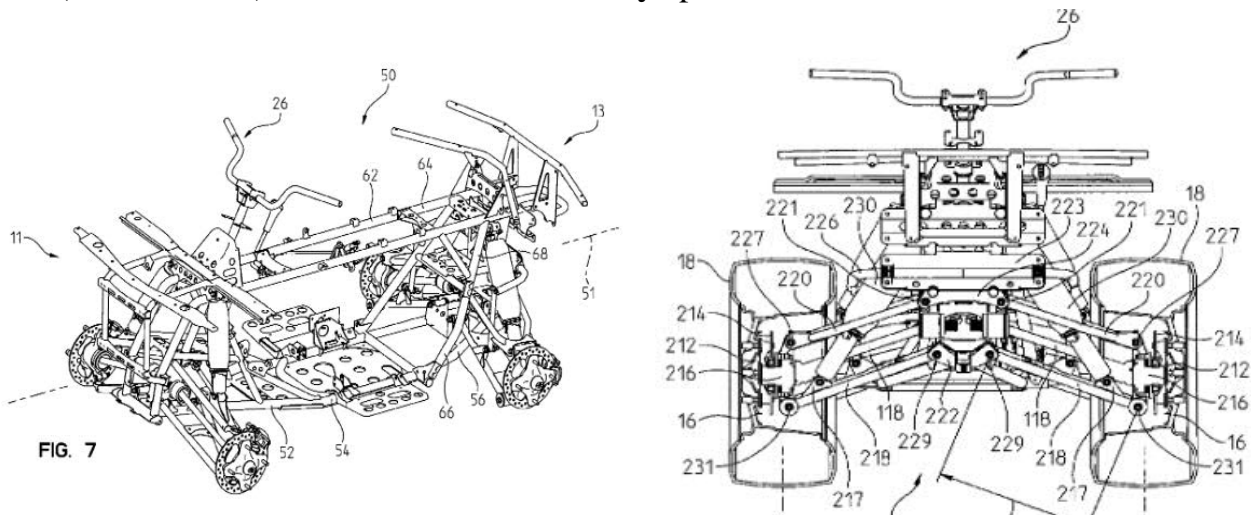
For these reasons, the specification supports Arctic Cat’s proposed construction and provides evidence contrary to Polaris’s proposed construction.

2. Prosecution History

Polaris relies on the prosecution history of the ’449 Patent to support its construction of the phrase “spaced apart” as meaning “do[es] not pass through.” The prosecution history is “intrinsic evidence” for the Court to consider. *See Phillips*, 415 F.3d at 1317. But the prosecution history “often lacks the clarity of the specification and thus is less useful for claim construction purposes.” *Id.* Still, the prosecution history may “inform the meaning of the claim language by demonstrating how the inventor

understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

Here, Polaris correctly points out that during the prosecution of the '449 Patent, the patent examiner rejected Claim 1⁶ in view of Polaris’s prior patent referred to as the “Brady” patent. (Jonas Decl., Ex. C at 162.) As part of the rejection, the patent examiner expressly rejected the claim because of the location of the shocks in relation to the sway bar. (*Id.* at 162-63.) Illustrations of the “**Brady**” patent are below:



(*Id.*, Ex. D at 190, 222.)

In response to the rejection based on the “Brady” patent, Polaris changed the language of Claim 1 to require that the first shock and second shock must be “spaced apart from an interior region of the generally U-shaped sway bar.” (*Id.*, Ex. C at 173.) To the patent examiner, Polaris explained that Brady did not teach or suggest these limitations. (*Id.* at 177.) Polaris also pointed to **Figure 20** as an illustration of Polaris’s new limitation. (*Id.*) Specifically, Polaris stated:

⁶ At that time, Claim 1 was called Claim 13. (See, e.g., Jonas Decl., Ex. C at 172.)

In Brady, shocks 230 are positioned within an interior of the torsion bar 226. In contrast, as shown in [Figure] 20 of the present application the first shock and the second shock **do not pass through** the interior of the sway bar, but rather are **spaced apart from the sway bar**.

(*Id.* (emphasis added).)

Polaris's use of the terms "do[es] not pass through the interior of the sway bar" in the prosecution history supports its construction, which uses the same language. *See Rembrandt Wireless Techs., LP v. Samsung Elecs. Co.*, 853 F.3d 1370, 1376 (Fed. Cir. 2017) (concluding that, for this particular patent, "[t]he clearest statement in the intrinsic record . . . [was] the descriptive statement the applicant made to the examiner when he inserted the limitation into the claims"). But the cited prosecution history also lends support to the viewpoint limitation in Arctic Cat's construction because it refers to Figure 20 as a manner to determine whether the shocks "pass through the interior of the sway bar" or "are spaced apart from the sway bar." (Jonas Decl., Ex. C at 177.) And from that viewpoint, Arctic Cat's proposed language of "outside" an interior region and Polaris's proposed language of "do[es] not pass through" an interior region are likely indistinguishable.

3. *Conclusion*

Ultimately, considering the constructions proposed by the parties and understanding this to be a close case, the Court adopts the following construction: **"when viewed from above, located outside an area defined by the interior region of the generally U-shaped sway bar."** Throughout the specification and in all instances during the history of the prosecution submitted to the Court, Polaris cited Figure 20 to

illustrate the meaning of “spaced apart from an interior region.” (’449 Patent at 44; Jonas Decl., Ex. C at 168; *id.* at 177.) The Court therefore finds that a person skilled in the art would look at a product from above to determine the “interior region” and whether the shocks are “spaced apart” from that region. Adopting the “when viewed from above” construction, there is no real difference between Arctic Cat’s proposed “located outside” language and Polaris’s proposed “do[es] not pass through” language, and therefore, the Court will adopt the “located outside” language because it more closely aligns with the specification’s other uses and the common meaning of “spaced apart.”

C. “[C]ommunicate ambient air to” the CVT unit or engine (’501 Patent)

The parties next dispute the meaning of the claim term “communicate ambient air to” either “an interior of the CVT unit” or “the internal combustion engine.” (’501 Patent at 111.) Polaris proposes the phrase should be given its plain and ordinary meaning, but if further construction is needed, the Court should construe the phrase to mean “communicate air from the outside of the vehicle” to “an interior of CVT unit” and “to the internal combustion engine.” (*See* J. Claim Constr., Ex. A at 1.) Arctic Cat’s proposed construction is “the air communicated to the interior of the CVT unit/internal combustion engine is ambient when it is at an interior of the CVT unit/internal combustion engine.” (*Id.*, Ex. B at 1.)

At base, the parties dispute whether the word “ambient air” means “air from the surrounding environment” versus “air having the same characteristics as outside air” (i.e. temperature, pressure, or composition). Because the claim language, specification, and

dictionary definitions all suggest the word “ambient” means air from outside the vehicle, the Court will give the phrase its plain and ordinary meaning.

1. Claim Language

Polaris’s plain language construction is supported by the claim language. The use of the term “ambient air” throughout Claim 1 and Claim 10 relates to where the air comes from – not to certain qualities of the air. Claim 1, for example, not only states that the air intake system “communicate[s] ambient air to an interior of the CVT unit,” but also that the “air intake system **reciev[es]** ambient air through an inlet.” (’501 Patent at 111 (emphasis added).) Claim 10 similarly provides that “ambient air **enters** the second air intake system” “**through** [exterior body panels].” (*Id.* (emphasis added).) Thus, the context of both Claim 1 and Claim 10 lends support for an interpretation of the word “ambient air” to mean “air from outside the vehicle.” *See Phillips*, 415 F.3d at 1314.

In contrast, the claim language does not support Arctic Cat’s construction.⁷ Arctic Cat’s insertion of the word “when” into Claim 1 and Claim 10 – requiring that the “air . . . [be] ambient **when** it is at” an interior – inserts an extraneous limitation to the claims that do not appear on the face of the patent. *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 950 (Fed. Cir. 1993) (“It is improper for a court to add ‘extraneous’ limitations to a claim, that is, limitations added ‘wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim.’” (quoting *E.I. Du Pont de*

⁷ Arctic Cat argues its interpretation is more consistent with the claim language because it does not read the word “ambient” out of the claim. But Polaris’s request that the Court give the phrase its plain and ordinary meaning does not omit the word “ambient.”

Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433 (Fed. Cir. 1988))). In fact, Arctic Cat admits in its response brief that it seeks the “when” construction to support its argument that the air must have the exact “same character” at the inlet and when it reaches the CVT unit or engine – specifically “temperature, pressure, and composition.” (Arctic Cat’s Responsive Claim Construction Br. at 21, Mar. 21, 2017, Docket No. 147.) But, reviewing the claim language as well as the rest of the patent, there is no language indicating a limitation for the air in the intake system to have the same temperature, pressure, or composition. (*See* ’501 Patent at 47-112.)

Arctic Cat contests this interpretation of its claim construction, asserting it gets its interpretation from the following language in Claim 1: “to an interior of the CVT unit.” (*Id.* at 111.) According to Arctic Cat, this means the air taken from outside the vehicle must have the same character when it enters the “interior of the CVT unit” in order to be ambient. First, this language only appears in Claim 1 and does not appear in Claim 10. (*See id.*) Second, Arctic Cat provides no support for its assertion that transmitting “ambient air” means air that has the same characteristics both when it enters the air intake and when it reaches the interior of the CVT unit.

Thus, the claim language provides strong support that the Court should give the claim its plain and ordinary meaning and nothing in the claims establishes a requirement related to temperature, pressure, or composition. Such extraneous limitations do not come from the claim language and, therefore, will not be added by the Court.

2. *Specification Language*

Polaris also asserts the specification supports construing the phrase “communicate ambient air to” based on the plain and ordinary meaning. In particular, Polaris highlights that the specification describes “ambient” in terms of where the air comes from – not the air’s temperature, pressure, or composition. (*See* ’551 Patent at 105 (“Ambient air **enters** an interior of air inlet housing through air inlet.” (emphasis added)); *id.* at 106 (“[A]mbient air **passes through** openings in [the] cover Ambient air is **introduced** into an interior of [the] air inlet housing”). Arctic Cat counters that the use of movement words does not conflict with Arctic Cat’s proposed construction. Instead, according to Arctic Cat, the specification simply explains how ambient air is moved.

The Court disagrees with Arctic Cat’s argument that the movement language does not conflict with its proposed construction. Arctic Cat asks the Court to interpret “communicate ambient air” as “air communicated to the interior of the [CVT unit or engine] **is ambient when it is at an interior** of the [CVT unit or engine].” (J. Claim Constr., Ex. B at 1.) But the specification only states that the air is ambient when it “enters” the housing and “passes through” openings in the cover. Nothing in the specification characterizes the qualities the air must have once it reaches the interior or elsewhere.

Another flaw in Arctic Cat’s argument is that based on the specification the air entering the inlets cannot have the same “composition” at the time it enters the CVT unit or engine. The specification – as well as Claim 3 – states that ambient air “passes through a **filter**.” (*Id.* at 106 (emphasis added); *see also id.* at 111 (“ambient air passing

through the filter”).) The purpose of a filter is to separate certain materials from the air prior to the air entering the internal units. Thus, Arctic Cat’s contention that “ambient air” means air “having the same character” as that surrounding the vehicle at the time it reaches the CVT unit or engine is not supported by the specification.

3. Dictionary Definitions

Finally, Polaris points to dictionary definitions to support the Court applying the plain and ordinary meaning. “[A]mbient” generally means “surrounding” or “encompassing.” (Jonas Decl., Ex. N at 347, 354); *see also* Merriam-Webster’s Collegiate Dictionary 36 (10th ed. 2001). Arctic Cat posits that the definition is of no consequences because “surrounding” air has various qualities and, thus, importing those qualities is appropriate. What Arctic Cat fails to acknowledge is that the adjective “ambient” does not describe other qualities. Instead, the adjective “ambient” means “surrounding.” When a person wants to describe other qualities in the “surrounding” air, he or she would add other adjectives, such as “ambient air temperature.” (*See* Jonas Decl., Ex. N at 354 (providing two different definitions for “ambient” and “ambient air temperature”).) Thus, while extrinsic evidence like dictionary definitions is less significant than the claim language itself, *Phillips*, 415 F.3d at 1317-18, the dictionary definitions provide strong support for applying the claim’s plain and ordinary meaning.

4. Conclusion

Because the claim language and specification, supported by extrinsic material, show a person of ordinary skill in the art would find the phrase “to communicate ambient

air to” either the “interior of the CVT unit” or “the internal combustion engine” facially apparent, the Court will give the phrase its plain and ordinary meaning.

D. “[A] center of gravity of the vehicle” (’501 Patent)

The parties finally dispute whether the phrase “located rearward of a center of gravity of the vehicle,” (’501 Patent at 112), is indefinite under 35 U.S.C. § 112. A patent is presumed valid, and the burden of establishing invalidity rests on the party asserting the invalidity. 35 U.S.C. § 282. Section 112 requires patent claims to be sufficiently definite. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). A patent claim will be deemed indefinite if, when “viewed in light of the specification and prosecution history,” it fails to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Id.* Section 112’s definiteness requirement “mandates clarity, while recognizing that absolute precision is unattainable.” *Id.*

Here, Arctic Cat contends the phrase “a center of gravity of the vehicle” lacks reasonable certainty and is therefore indefinite. In particular, Arctic Cat argues the ’501 Patent does not provide a person of skill with the conditions under which it should calculate the center of gravity and, because the ’501 Patent provides for different centers of gravity depending on a vehicle’s cargo, the term is indefinite. Arctic Cat relies on Table II (illustrated below) to support its argument that the ’501 Patent calls for numerous different centers of gravity.

TABLE II

	(Setup 1) Vehicle unloaded	(Setup 2) Vehicle with 200 pound Driver	(Setup 3) Vehicle with 200 pound Driver and 200 pound Passenger	(Setup 4) Vehicle with Driver, Passenger, and cargo (total added weight 740 pounds)
Change in CG	—	less than 1%	1%	6%

(See '501 Patent at 110.)

Polaris provides two responses to Arctic Cat's invalidity claims. First, Polaris argues there is only one method for calculating center of gravity – a formula a person of skill in the art would already understand with reasonable clarity. Second, Polaris asserts that there is only one relevant center of gravity in the patent – the center of gravity of an unloaded vehicle. The Court finds the phrase to be sufficiently definite and will construe the claim based on its plain and ordinary meaning.

1. Claim Language

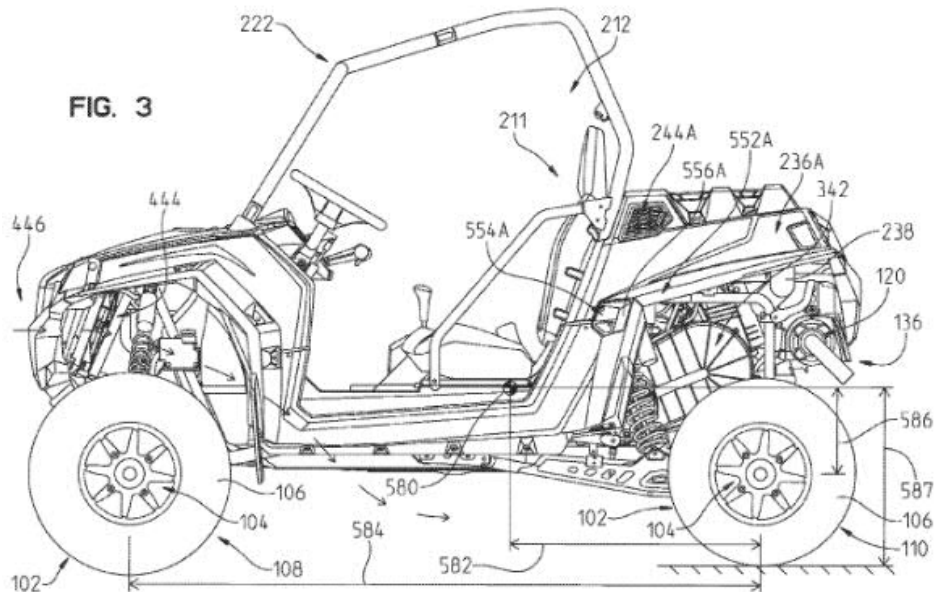
Arctic Cat does not point to anything in the claim language itself to indicate that the phrase “[a] center of gravity of the vehicle” is indefinite. Instead, Arctic Cat points to the absence of specific conditions as evidence the claim is indefinite. In response, Polaris relies on the language in the claim; specifically, Polaris points to the use of the words “a vehicle” and “the vehicle” in the claim – meaning a person of skill would understand that

the center of gravity should be calculated based the vehicle itself, not a vehicle with cargo.

The language in the claim counsels toward validity. While the claim does not explicitly state “calculate the center of gravity based on an empty vehicle” the claim does specify that the center of gravity should be calculated for “the vehicle” – as in the vehicle described in the claim. Therefore, the claim language supports Polaris’s argument that the claim is definite.

2. Specification

Arctic Cat particularly relies on the specification to support its argument that the phrase “a center of gravity of the vehicle” is indefinite. As set forth above, Table II describes that the center of gravity will change with the addition of a driver, passengers, and/or cargo. (*See id.*) But the specification provides further information. The specification directs the reader to review Figure 3, depicted below. (*Id.* at 109.)



(’501 Patent at 52.) The specification then provides that the “center of gravity **580** of an **unloaded vehicle** . . . is positioned a distance **582** forward of rear axle . . . and a distance . . . above the rear axle Center of gravity **580** is generally centered close to or on vertical centerline plane” of the vehicle. (*Id.* at 109-10 (emphasis added).)

The specification further explains that, for the illustration in Figure 3, “distance **584** is 81.5 inches and distance **582** is about 43% of distance **584** **when [the vehicle] is unloaded.**” (*Id.* at 110 (emphasis added).) The specification further states where the center of gravity is generally aligned and describes center of gravity with respect to ground clearance – numerous times making calculations based on an “**unloaded vehicle.**” (*Id.*)

Thus, while Table II illustrates “various vehicle setups,” all of the examples calculate center of gravity using “an unloaded vehicle.” The fact that the specification

clearly provides that center of gravity should be calculated using an “unloaded vehicle” weighs in favor of definiteness.

3. *Caselaw*

Finally, Arctic Cat cites a number of cases finding a claim indefinite when, depending on the particular test, a person skilled in the art could get different results. For example, in *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.* the Federal Circuit found a claim was indefinite as to the term “molecular weight” because the “weight [could] be ascertained by any of three possible measures . . . [and] [t]he claims [did] not indicate which measure to use.” 789 F.3d 1335, 1344 (Fed. Cir. 2015); *see also Dow Chem. Co. v. Nova Chems. Corp. (Can.)*, 803 F.3d 620, 635 (Fed. Cir. 2015) (claim indefinite where an expert did “not even [apply] an established method but rather one developed for this particular case”). In another example, testimony from numerous experts indicated to the court that “the particular conditions under which pH is measured can have demonstrable impacts on the resulting pH values” and, therefore, the phrase “local pH” was indefinite. *Reckitt Benckiser Pharm. Inc. v. Watson Labs., Inc.*, Nos. 13-1674, 14-422, 2016 WL 3186659, at *6-7 (D. Del. June 3, 2016), *appeal docketed*, No. 16-2397 (Fed. Cir. July 28, 2016). In yet another case, a court found the term “mean particle size” indefinite because the mean could refer to either “volume weighted mean” or “surface weighted mean” and the intrinsic record did not guide a practitioner on which to apply. *Otsuka Pharm. Co. v. Torrent Pharm. Ltd.*, 151 F. Supp. 3d 525, 548 (D.N.J. 2015).

The case law cited by Arctic Cat interprets the Supreme Court's decision in *Nautilus* to mean that, when a term has a meaning that can be calculated in multiple ways, the term is indefinite if the patent does not explain which calculation to apply. *See, e.g., id.* at 545-46 (discussing the Federal Circuit's decisions in *Teva* and *Dow Chem. Co.*). In particular, the Federal Circuit has noted that particularly "where different approaches to measurements are involved," the post-*Nautilus* standard requires that "[t]he claims, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art." *Dow Chemical Co.*, 803 F.3d at 630 (alteration in original) (quoting *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014).)

But the phrase "a center of gravity of the vehicle" does not present a circumstance where different "approaches" to measurement are involved. *See id.* In fact, Arctic Cat admits that "the parties do not dispute what center of gravity means." (Arctic Cat's Opening Claim Construction Br. at 30.) Arctic Cat must concede this meaning as "center of gravity" is often used as an understood term in patents. *See, e.g., Sarkisian v. Winn-Proof Corp.*, 697 F.2d 1313, 1315-16 (9th Cir. 1983) (using "center of gravity" as an element of a formula in a patent); *Breuer Elec. Mfg. Co. v. Tennant Co.*, No. 96-1481, 1997 WL 543097, at *4 (N.D. Ill. Aug. 22, 1997) (finding the term "center of gravity" definite). Further, both the claim language and specification indicate that the proper way to measure the center of gravity is with "an unloaded vehicle." Thus, applying Arctic Cat's caselaw, the claim language requiring "a vehicle" and language in the specification

directly related to “an unloaded vehicle” show the patent informs those skilled in the art about the scope of the invention with reasonable certainty.

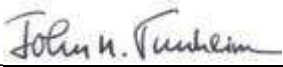
4. Conclusion

The Court will apply a plain and ordinary meaning construction. The phrase “a center of gravity of the vehicle” is definite and means the “center of gravity of the vehicle when unloaded.” The claim language and specification support this interpretation. Because the patent language sufficiently informs those skilled in the art about the scope of the invention with reasonable certainty, the claim is not indefinite.

ORDER

Based on the foregoing, and all the files, records, and proceedings herein, the Court hereby **ADOPTS** the construction of the claim terms and phrases within U.S. Patent No. 8,944,449 and U.S. Patent No. 9,217,501 as set forth in the Memorandum accompanying this Order.

DATED: December 14, 2017
at Minneapolis, Minnesota.



JOHN R. TUNHEIM
Chief Judge
United States District Court