IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

SRAM, LLC,

Plaintiff,

v.

FOX FACTORY, INC.,

Defendant.

CIVIL ACTION FILE

No. 1:23-CV-00492-SCJ

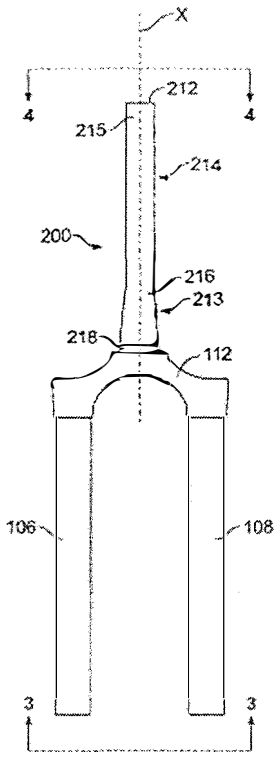
ORDER

This matter appears before the Court for claim construction of the two disputed terms in U.S. Patent No. 10,328,993 B2 ("the '993 Patent") and the one disputed term in U.S. Patent No. 7,147,207 (the '207 Patent") identified in the Parties' Joint Claim Construction Statement. Doc. No. [37].[1] The Parties briefed their respective positions through their opening and responsive Claim Construction Briefs (Doc. Nos. [38]–[39]; [41]–[42]), and the Court held a hearing on the dispute on November 18, 2024.

[1] All citations are to the electronic docket unless otherwise noted, and page numbers referenced therein are those imprinted by the Court's docketing software.

I. BACKGROUND

Plaintiff SRAM, LLC ("SRAM") asserts two patents (the '993 Patent and the '207 Patent) against Defendant FOX Factory, Inc. ("FOX"). The '993 Patent is directed to a bicycle steerer tube. Doc. No. [38-1] ("'993 Patent"), 1:6–7. A steerer tube is that portion of a bicycle between the bicycle's handle bars (affixed at the upper end of the steerer tube) and the front bicycle fork (affixed at the lower end of the steerer tube) through which the front wheel of a bicycle connects to the bicycle's frame. In the figure below ('993 Patent, Fig. 2), the steerer tube is shown at 200:



The '207 Patent is directed to an actuator apparatus on a bicycle. The actuator apparatus controls the valve mechanism of a bicycle's suspension system, allowing for the adjustment of the bicycle's suspension settings. Doc. No. [38-2] ("'207 Patent"), 1:7–13. The actuator apparatus includes an adjuster assembly for adjusting the damping characteristics of the suspension system, thereby affecting the way the bicycle's shock absorber performs. Id. at 1:7–13, 1:22–24.

II. LEGAL STANDARD

A patent's claims "define the invention to which the patentee is entitled the right to exclude." Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (cleaned up). "The purpose of claim construction is to 'determin[e] the meaning and scope of the patent claims asserted to be infringed.'" O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995)). And that determination, although sometimes requiring "subsidiary factfinding" with reference to "extrinsic evidence," is ultimately a question of law. Teva Pharms. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 326–27, 332 (2015) (citing Markman v. Westview Instruments, 517 U.S. 370, 388–91 (1996)).

A court construes the meaning of a disputed claim term by relying on "intrinsic evidence"—the language of the claims themselves, the patent specification, and the prosecution history (i.e., the "the complete record of the proceedings before the [United States Patent and Trademark Office]"). Phillips, 415 F.3d at 1314–15, 1317. The patent specification is "[u]sually dispositive; it is the single best guide to the meaning of a disputed term." Id., at 1315 (cleaned up). However, "[w]hile claim terms are understood in light of the specification, a claim construction must not import limitations from the specification into the claims." Deere & Co. v. Bush Hog, LLC, 703 F.3d 1349, 1354 (Fed. Cir. 2012).

In addition to relying on intrinsic evidence to determine a claim term's meaning, 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." Phillips, 415 F.3d at 1317 (cleaned up). However, extrinsic evidence "is less significant than the intrinsic record in determining the legally operative meaning of claim language." Id. (cleaned up).

The Court generally gives "the words of a claim . . . their ordinary and customary meaning," which is "the meaning that the [claim] term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Phillips, 415 F.3d at 1313. "There are only two exceptions to this general rule: 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." Thorner v. Sony Computer Entm't Am. LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012).

Patent law codifies a "definiteness" requirement. Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 902 (2014). That is, under 35 U.S.C. § 112(b), a patent must "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention."[2] A patent fails to meet this

[2] "In the Leahy-Smith America Invents Act, Pub. L. 112-29, 125 Stat. 284, enacted in 2011, Congress amended several parts of the Patent Act [of 1952]," including § 112. Nautilus, 572 U.S. at 902 n.1. For "patent applications filed before September 16, 2012, and proceedings commenced before September 16, 2011,"the amended version of § 112 does not apply." Id. However, as it concerns the definiteness requirement, the modification made by America Invents Act is "minor" (Nautilus, 572 U.S. at 902 n.1)

requirement if "its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." Nautilus, 572 U.S. at 901. "Indefiniteness renders a claim invalid[] and must be shown by clear and convincing evidence." Takeda Pharm. Co. v. Mylan Inc., No. 13-cv-04001-LHK, 2014 U.S. Dist. LEXIS 159527, *16 (Nov. 11, 2014).

III. CLAIM CONSTRUCTION

The Parties dispute the meaning of two phrases/terms found in claims 1, 61, and 64 of the '993 Patent and one phrase found in claim 1 of the '207 Patent.[3]

---

and not significant to the Court's analysis. Compare § 112(b) (requiring a patent to "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which *the inventor or a joint* inventor regards as the invention definiteness requirement") with 35 U.S.C. § 112, ¶ 2 (2006) (requiring the patent to conclude with "one or more claims particularly pointing out and distinctly claiming the subject matter which *the applicant* regards as his invention") (emphasis added). Moreover, the Parties do not debate which version of § 112 applies here, and FOX references § 112(b). Thus, the Court references the definiteness requirement as amended.

[3] SRAM's claim construction briefing is replete with language tacitly deriding FOX's claim construction positions. For example, SRAM uses scare quotes in referring to FOX's expert (e.g., "Fox's IPR petition was supported by a declaration from the very same "expert" here[.]"), it accuses FOX and its expert of disingenuousness, of "make believe," and of "pretend[ing]" a lack of understanding, and it denigrates the opinion of FOX's expert as that of a "paid expert." Doc. [41], 15 n.1, 16, 19–20. To the

Claim 1 of the '993 Patent states:

> A steerer tube for a bicycle, the steerer tube comprising:
> an elongate hollow body arranged around a steering axis located in ***a vertical plane of travel of the bicycle,***
> the body having upper and lower sections, a segment of the upper section adapted to be joined to a bicycle handlebar, a segment of the lower section adapted to be joined to a crown of a front wheel fork of the bicycle, the lower section joined to the upper section, and outer surfaces of the upper and lower sections of the body being circular in cross section, and
> the body formed by a wall, ***a thickness of the wall at any point in the lower section of the body varying as a function of the cross-sectional angle of the point relative to the plane of travel,*** the wall thickness being at a maximum in the plane of travel of the bicycle.

('993 Patent, 8:5–19 (disputed terms bolded and italicized)).[4]

Claim 1 of the '207 Patent states:

> An actuator apparatus for controlling a valve mechanism of a suspension system, the actuator apparatus comprising:
> a valve actuating assembly operatively connected to the valve mechanism, the valve actuating assembly including a camshaft rotatable between at least two positions to adjust the valve mechanism between various suspension settings; and
> an adjuster assembly operatively connected to the valve actuating assembly for ***adjusting the damping characteristics corresponding***

---

extent SRAM seeks to challenge Dr. Slocum's qualifications, it may do so at the appropriate time through an appropriate motion. The rhetoric SRAM employes in its briefing, however, is beneath the standard of professionalism that the Court expects from counsel.

[4] Because the claim elements that include the disputed terms are identical across each of Claims 1, 61, and 64, the Court does not reproduce Claims 61 and 64 here.

> ***to at least one of the positions of the valve actuating assembly independently of the damping characteristics corresponding to another position of the valve actuating assembly.***

('207 Patent, 8:45–58). The Court addresses each of the disputed claim terms in turn below.

A. "A vertical plane of travel of the bicycle"/"plane of travel"

SRAM's Proposed Construction	Fox's Proposed Construction	Court's Construction
"vertical plane aligned with the running direction of the bicycle"	"vertical plane of the bicycle in its upright position, the vertical plane being aligned with the fore-aft travel direction of the bicycle"[5]	"vertical plane aligned with the running direction of the bicycle"

SRAM argues that a person of ordinary skill in the art ("POSA") understands the disputed term to have a plane and ordinary meaning. However, SRAM proposes a restatement to the extent such a restatement would be helpful to the jury. Doc. No. [38], 15. FOX disagrees. FOX's expert, Alexander Slocum, Ph.D., asserts that the term has no defined or well-understood meaning (Doc. No. [39-6] ("Slocum Dec.") ¶ 25), and FOX

[5] This is FOX's amended proposed construction. Doc. No. [42], 5. Initially, FOX proposed that the Court construe these terms as "vertical plane of the bicycle frame when the bicycle is in upright position with both wheels aligned in the same direction." Doc. No. [37-1], 1.

argues that SRAM's construction is far broader the '993 Patent's disclosure, which links the bicycle's plane of travel to "only a fore-and-aft (i.e., forward and backward) direction." Doc. No. [42], 6.[6]

SRAM's proposed construction is supported by the '993 Patent's disclosure. The Patent describes "a plane of travel" as "aligned with the running direction of the bicycle." '993 Patent, 1:10–11. In describing the thickness of the walls of "conventional" steerer tubes, the Patent explains that those walls are of "uniform stiffness longitudinally, or fore-and-aft and in alignment with plane of travel." Id., 1:33–37. Thus, the plane of travel is aligned with the forward and backward direction of the bicycle or the running direction of the bicycle. Regardless of the direction in which it is steered (i.e., regardless of whether both wheels are aligned in the same direction—as in a bicycle traveling a straight path—or are out of that alignment—as in a bicycle

---

[6] FOX offered Dr. Slocum's testimony at the claim construction hearing, and SRAM objected to Dr. Slocum testifying as an expert because Dr. Slocum's *curriculum vitae* (Doc. No. [39-6], 30–73) is not updated past December 2022 and he has not provided a list of proceedings in which he has testified, as required by Federal Rule of Civil Procedure 26(a)(2). FOX argued that Dr. Slocum intended to testify as a POSA, rather than as an expert, and that the deficiencies SRAM noted did not prohibit Dr. Slocum from testifying in that capacity. SRAM did not contest Dr. Slocum's status as a POSA as of the date of the filing dates of the '993 and '207 Patents. The Court allowed Dr. Slocum to testify at the hearing, and it has considered that testimony as limited to that supplied by a POSA.

traveling a curved path or making a turn—a vertical bicycle move either forwards or backwards. Although FOX suggests a construction that accounts for this forward and backward direction, SRAM's construction better captures the notion of the bicycle's movement and extinguishes any confusion over whether the forward and backward direction is limited to the instance where the bicycle's front and back wheels are in alignment. Accordingly, the Court adopts SRAM's proposed construction of this term.

B. "A thickness of the wall at any point in the lower section of the body varying as a function of the cross-sectional angle of the point relative to the plane of travel"

SRAM's Proposed Construction	Fox's Proposed Construction	Court's Construction
"a thickness of the wall at any point in the lower section of the body continuously changing relative to the plane aligned with the running direction of the bicycle"	The term is indefinite under 35 U.S.C. § 112(b).	"a thickness of the wall at any point in the lower section of the body changing as the cross-sectional angle of the point relative to the plane of travel change"

FOX contends that this disputed term is indefinite as it fails to inform a POSA about the scope of the invention with "reasonable certainty," as required by Nautilus, 572 U.S. at 901. According to FOX, the '993 Patent leaves the term undefined and questions how the thickness of the steerer tube wall

at a given point can vary relative to anything, in view of the fixed nature of the tube. Doc. [39], 20; Slocum Dec. ¶ 28. According to FOX, the Patent fails to explain how the wall thickness varies relative to the cross-sectional angle—that is, whether it increases, decreases, or otherwise varies—and whether the variation must be continuous or at only two or more points. Doc. [39], 20–21. SRAM counters that the term is not indefinite because the '993 Patent provides numerous examples of the wall thickness continuously varying compared to the plane of travel. It relies on the Federal Circuit's explanation in Enzo Biochem, Inc. v. Applera Corp., 599 F.3d 1325, 1335 (Fed. Cir. 2010). That where "the intrinsic evidence . . . provides a general guideline and examples sufficient to enable a person of ordinary skill in the art to determine the scope of the claims, . . . the claims are not indefinite." (cleaned up).

Here, the Patent includes figures depicting the steerer tube wall changing in thickness as the angle from the plane of travel changes, with the wall being at its thickest in the direction of the plane of travel and thinnest in the direction perpendicular to that plane. See e.g., '993 Patent, Figs. 3, 9, 10, 16, 17, 22, 23, 28, 29, 34, and 35. The Court agrees with SRAM that the

"function" recited in the claim term is the relationship between the steerer tube wall's thickness and the plane of travel—as the cross-sectional angle relative to the plane of travel changes, the wall thickness changes. Nothing in this relationship requires that each point in the cross-section have a different wall thickness. Moreover, the '993 Patent criticizes "conventional steerer tubes" as having walls that are "uniformly thick" and distinguishes the "[s]teerer tubes according to the invention" because they have "a large stiffness and strength in the fore and aft plane of travel . . . [b]ut . . . the wall thickness outside the plane of travel may be reduced. '993 Patent, 2:4–8. In other words the claimed steerer tube has a wall that is thickest in the direction of the plane of travel and less thick outside that plane (i.e., not uniform in thickness).

Accordingly, the Court agrees with SRAM that the term is not indefinite. However, the intrinsic evidence fails to adequately support SRAM's proposed construction of the term as requiring a wall thickness that is "continuously changing." Even if the embodiments disclosed in the '993 Patent (depicting walls that are elliptical in shape) are viewed as implicitly capturing a continuous change in wall thickness that SRAM proposes, the

Court declines to read such a meaning into the claim from the embodiments. Evolusion Concepts, Inc. v. HOC Events, Inc., 22 F.4th 1361, 1367 (Fed. Cir. 2022) (noting that "[i]t is not enough that the only embodiments, or all of the embodiments, contain a particular limitation to limit claims beyond their plain meaning" and explaining that "the embodiments are consistent with—not required by—what is identified as the invention.") (cleaned up). Contrary to SRAM's argument, the Patent's prosecution history does not indicate that the patent examiner read this claim term to require a continuous change in wall thickness. In applying a combination of two prior art references (D'Alusisio and Galasso), the examiner noted that while "D'Aluisio shows different types of profiles (figures 1A and 6C) of the body)," it

> does not show a thickness of the wall at any point in the lower section of the body varying as a function of the cross-section angle of the point relative to the plane of travel, the wall thickness being at a maximum in the plane of travel of the bicycle.

Doc. No. [38-3], 43. The Court agrees with FOX that this merely represents an assertion by the examiner that D'Aluisio failed to disclose the stated claim limitation. In line with the examiner's statement, the referenced figures of D'Aluisio do not appear to show wall thickness in the lower section of a steerer tube body varying as a function of the cross-sectional angle of the

point relative to the plane of travel. Figure 1A of D'Aluisio depicts a perspective of a suspension fork, which includes "the lower or inner steer tube,"[7] but does not provide a detailed view of the lower wall and, while Figure 6C depicts a detailed cross-sectional view of a steerer tube, it does not appear to be that of the lower section of the tube.[8] Doc. No. [38-3], 4:26–28, 53–54). Thus, the '993 Patent's prosecution history does not support the "continuous change" meaning that SRAM proposes to apply. For these reasons, the Court declines to adopt SRAM's proposed construction and adopts its own construction, presented above.

C. "Adjusting the damping characteristics corresponding to at least one of the positions of the valve actuating assembly independently of the damping characteristics corresponding to another position of the valve actuating assembly"

SRAM's Proposed Construction	Fox's Proposed Construction	Court's Construction
"adjusting the damping characteristics corresponding to at least a first position of the valve actuating assembly without	The term is indefinite under 35 U.S.C. § 112, ¶2. Alternatively: "when the damping characteristics corresponding to one of the positions of the valve	Plain and ordinary meaning; no construction necessary

[7] Depicted as 13 in the figure. Doc. No. [38-3], 6:15–18.

[8] D'Aluisio identifies the section (14) from which the plane of the cross-section in Figure 6 is acquired as the "upper outer steer tube."

adjusting the damping characteristics corresponding to a second position of the value actuating assembly"	actuating assembly is adjusted, the damping characteristics corresponding to all other positions of the valve actuating assembly remain unaffected"	

The crux of the dispute here is where this term requires that an adjustment to the damping characteristics of one position of the valve actuating assembly not affect the adjustment of the damping characteristics of one other position of the valve actuating assembly or that the adjustment to one position not affect the adjustment of any other position. FOX considers the claim indefinite, arguing that the disputed term fails to inform a POSA of what the claim covers when a valve actuating assembly has three or more positions. Doc. [39], 25. The Court agrees with FOX that the term is not limited to a valve actuating assembly with only two positions. However, it disagrees that the claim is rendered indefinite because it does not identify whether and how *each* of the other positions are affected when one of the positions is adjusted. The claim requires a valve actuating assembly with at least two positions. And, as to the two positions, the claim informs the POSA that when

one position is adjusted, there must be position that remains unaffected by the adjustment. The claim is not indefinite.

FOX correctly notes that each embodiment disclosed in the '207 Patent has three adjustment positions for the valve actuating assembly and further discloses that when the damping characteristics of one of the positions is adjusted, both of the other positions remain unaffected. Doc. [39], 27. Based on this, FOX proposes that the Court construe the term to require that when one position is adjusted all other positions remain unaffected. The Court declines to limit the claim based on the disclosed embodiments. Here, "the embodiments are consistent with—not required by—what is identified as the invention." Evolusion Concepts, 22 F.4th at 1367. Further, the term has a plain and ordinary meaning, rendering construction unnecessary.

IV. CONCLUSION

For the foregoing reasons, the Court construes the disputed claim terms as follows:

Claim Term	Court's Construction
"vertical plane of travel of the bicycle" / "plane of travel" ('993 Patent; claims 1, 61, 64)	"vertical plane aligned with the running direction of the bicycle"
"a thickness of the wall at any point in the lower section of the	"a thickness of the wall at any point in the lower section of the

body varying as a function of the cross-sectional angle of the point relative to the plane of travel" ('993 Patent; claims 1, 61, 64)	body changing as the cross-sectional angle of the point relative to the plane of travel change"
"adjusting the damping characteristics corresponding to at least one of the positions of the valve actuating assembly independently of the damping characteristics corresponding to another position of the value actuating assembly" ('207 Patent; claim 1)	Plain and ordinary meaning; no construction necessary

IT IS SO ORDERED this 19th day of November, 2024.

Steve C. Jones

HONORABLE STEVE C. JONES
UNITED STATES DISTRICT JUDGE