

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CARRUM TECHNOLOGIES, LLC,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 18-1647-RGA-SRF
)	
FORD MOTOR COMPANY,)	
)	
Defendant.)	

MEMORANDUM ORDER¹

At Wilmington this 13th day of June, 2023, the court having considered the following motions: (1) plaintiff Carrum Technologies, LLC's ("Carrum" or "Plaintiff") motion to strike defendant Ford Motor Company's ("Ford" or "Defendant") reliance on undisclosed purported prior art in the opening expert report on invalidity by William C. Messner, Ph.D (the "Messner Report") (D.I. 199),² and (2) Defendant's motion to strike portions of the opening expert report on infringement by Gregory Shaver, Ph.D (the "Shaver Report") (D.I. 206),³ and the parties' presentations during the oral argument on May 24, 2023, IT IS ORDERED that Plaintiff's motion to strike is DENIED and Defendant's motion to strike is DENIED for the following reasons.

¹ In this district, motions to strike are treated as non-dispositive motions which may be resolved by the court pursuant to 28 U.S.C. § 636(b)(1)(A) and D. Del. LR 72.1(a)(2) where, as here, the ultimate decision is not dispositive of a party's claims. *See Integra Lifesciences Corp. v. Hyperbranch Med. Tech., Inc.*, C.A. No. 15-819-LPS-CJB, 2017 WL 11558096, at *1 n.1 (D. Del. Dec. 11, 2017).

² The briefing and filings associated with Plaintiff's motion to strike Defendant's reliance on undisclosed prior art are found at D.I. 200; D.I. 201; D.I. 202; D.I. 216; D.I. 218; D.I. 227; and D.I. 228.

³ The briefing and filings associated with Defendant's motion to strike portions of the opening report of Gregory Shaver, Ph.D are found at D.I. 207; D.I. 210; D.I. 229; D.I. 230; D.I. 239; and D.I. 254.

1. Background. Plaintiff filed this patent infringement action on October 23, 2018, asserting causes of action for infringement of U.S. Patent Nos. 7,512,475 (“the ’475 patent”) and 7,925,416 (“the ’416 patent;” collectively, the “Asserted Patents”) by all of Defendant’s vehicles from 2013 to the present featuring adaptive cruise control (“ACC”) systems. (D.I. 1 at ¶¶ 14-20) The Asserted Patents disclose systems and methods for enabling a vehicle having ACC to reduce its speed in a turn according to the vehicle’s position within the turn, and to ignore objects detected during the turn that are not in the vehicle’s path. (D.I. 1, Exs. 1-2)

2. The court issued an order on claim construction on November 22, 2021, construing three disputed terms. (D.I. 88; D.I. 92) On May 4, 2022, Plaintiff served its most recent set of supplemental infringement contentions. (D.I. 117) On August 12, 2022, fact discovery closed and Defendant served its most recent set of supplemental invalidity contentions and supplemental responses to Plaintiff’s interrogatories. (D.I. 194; D.I. 200, Exs. E-F)

3. The parties exchanged opening expert reports on January 9, 2023. (D.I. 189; D.I. 190) Plaintiff’s Shaver Report on infringement disclosed for the first time that Plaintiff had dropped 13 of the original 18 asserted claims identified in Plaintiff’s infringement contentions. (D.I. 207, Exs. 1-2) On January 24, 2023, the parties stipulated to amend the scheduling order deadlines, giving Defendant until February 8 to submit an amended opening expert report on invalidity that reflected Plaintiff’s case narrowing. (D.I. 194; D.I. 198) There is no dispute that Defendant’s Messner Report identified sixteen documents which had been produced during fact discovery but were not previously disclosed in Defendant’s invalidity contentions or interrogatory responses. (D.I. 216 at 16; D.I. 227 at 1)

4. Expert discovery closed on May 9, 2023, and the deadline for case dispositive motions passed on May 24, 2023. (D.I. 246) The pretrial conference and trial are scheduled to go forward on November 9 and November 27, 2023, respectively. (*Id.*)

5. **Legal standard.** Infringement and invalidity contentions serve the purpose of putting the parties on notice of the theories being asserted in the case. *See TQ Delta, LLC v. ADTRAN, Inc.*, C.A. No. 14-954-RGA, 2021 WL 3728919, at *1 (D. Del. Aug. 23, 2021). These contentions are treated as initial disclosures under Federal Rule of Civil Procedure 26(a). *See Intellectual Ventures I LLC v. AT&T Mobility LLC*, C.A. No. 13-1668-LPS *et al.*, 2017 WL 658469, at *2 (D. Del. Feb. 14, 2017). “If a party fails to provide information . . . as required by Rule 26(a) or (e), the party is not allowed to use that information . . . to supply evidence on a motion, at a hearing, or at trial, unless the failure was substantially justified or is harmless.” Fed. R. Civ. P. 37(c)(1).

6. Because “[t]he exclusion of critical evidence is an extreme sanction,” a motion to strike should not be granted where an untimely or improper disclosure amounts to a “slight deviation from pre-trial notice requirements” or results in only “slight prejudice” to the movant. *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 791-92 (3d Cir. 1994) (internal quotation marks and citations omitted). To determine whether the exclusion of evidence is warranted, the court weighs the *Pennypack* factors: (1) the surprise or prejudice to the moving party; (2) the ability of the moving party to cure any such prejudice; (3) the extent to which allowing the evidence would disrupt the order and efficiency of trial; (4) bad faith or willfulness in failing to disclose the evidence; and (5) the importance of the evidence withheld. *See Meyers v. Pennypack Woods Home Ownership Ass’n*, 559 F.2d 894, 904-05 (3d Cir. 1977), *overruled on other grounds*, *Goodman v. Lukens Steel Co.*, 777 F.2d 113 (3d Cir. 1985). “The determination of whether to

exclude evidence is within the discretion of the district court.” *TQ Delta*, 2021 WL 3728919, at *1 (citing *Konstantopoulos v. Westvaco Corp.*, 112 F.3d 710, 719 (3d Cir. 1997)).

I. Plaintiff’s Motion to Strike Undisclosed Prior Art

7. Plaintiff moves to strike sixteen documents cited in the Messner Report in support of Defendant’s invalidity arguments. (D.I. 200) These documents fall into four categories: (1) internal Ford documents describing the pre-2004 prior art Curve Control system which were attached as exhibits to depositions of Ford witnesses (“Category 1 documents”); (2) internal Ford documents describing the pre-2004 prior art Curve Control system which were not attached as exhibits to depositions of Ford witnesses (“Category 2 documents”); (3) Ford patents describing prior art stability control systems and Curve Control (“Category 3 documents”); and (4) Delphi ACC prior art (“Category 4 document”). The documents are set forth by category in the chart below:

<u>Category 1</u> Internal Ford Docs. / Depo Exhibits	<ul style="list-style-type: none"> • Curvature Control Logic Description (FORD_CARRUM000736136) • Ford Technical Report, “Curvature Control for Enhancing Understeer Performance” (FORD_CARRUM000730032) • Ford’s “Equation Section 1 Euler Analysis” (FORD_CARRUM000730443)
<u>Category 2</u> Internal Ford Docs. / Not Depo Exhibits	<ul style="list-style-type: none"> • ETR Logic Description (FORD_CARRUM000735506) • Ford’s “Curvature Control Logic Description” (FORD_CARRUM000738525) • Ford’s “RSC Logic Flow Description” (FORD_CARRUM000661243) • History of Vehicle Stability Control Development within Active Safety Department (FORD_CARRUM000101895)
<u>Category 3</u> Ford Patents	<ul style="list-style-type: none"> • U.S. Patent No. 6,073,065 (FORD_CARRUM_PUBLIC_00006146) • U.S. Patent No. 6,122,568 (FORD_CARRUM_PUBLIC_00006160) • U.S. Patent No. 6,185,485 B1 (FORD_CARRUM_PUBLIC_00006192) • U.S. Patent No. 6,263,261 B1 (FORD_CARRUM_PUBLIC_00006197)

	<ul style="list-style-type: none"> • U.S. Patent No. 6,556,908 B1 (FORD_CARRUM_PUBLIC_00006304) • U.S. Patent No. 6,853,902 B2 (FORD_CARRUM_PUBLIC_00006567) • U.S. Patent No. 6,915,193 B2 (FORD_CARRUM_PUBLIC_00006612) • U.S. Patent No. 6,963,797 B2 (FORD_CARRUM_PUBLIC_00006639)
Category 4 Delphi ACC Prior Art	<ul style="list-style-type: none"> • Software Requirements Document, MY2004 Land Rover L319 / L320, ACC3 Controller (FORD_CARRUM000738697)

Plaintiff also moves to strike the paragraphs in the Messner Report which refer to or rely on these sixteen documents. (D.I. 200 at 3-4) According to Plaintiff, the Messner Report cites these documents to support a fundamentally new theory of invalidity. (D.I. 227 at 3)

8. Defendant does not dispute that the sixteen documents were not cited in its invalidity contentions or interrogatory responses. Instead, Defendant contends that the recent shift in Plaintiff's infringement theory to focus on the Engine Torque Reduction ("ETR") subfunction of Curve Control necessitated Defendant's reliance on these documents. (D.I. 216 at 6) Defendant maintains that the entire Curve Control system is an asserted prior art reference and the sixteen documents merely provide additional evidentiary support about Curve Control. (*Id.* at 8)

9. For the following reasons, the court finds that the *Pennypack* factors weigh against striking this material.

10. ***Prejudice to Plaintiff.*** Plaintiff argues that it is prejudiced by the late disclosure of the documents in Categories 1 and 2 because fact discovery is closed, and there is no time to depose the engineers who authored those documents on when the prior art systems were reduced to practice, whether all claim elements are satisfied by the prior art systems, and whether those systems pre-date the priority date of the Asserted Patents. (D.I. 200 at 9-10) But Plaintiff's claims of prejudice regarding the documents in Category 1 are undercut by the record, which

shows that Plaintiff attached those three documents as exhibits to the depositions of Ford engineers Daniel Eisele and Albert Salib. (D.I. 216, Exs. 12, 14-15)

11. Plaintiff maintains that the untimely disclosure of the Category 2 documents is the most prejudicial because these documents were not included as exhibits to the Eisele or Salib deposition transcripts. (D.I. 227 at 2) Yet the record supports Defendant's position that the four documents in Category 2 are closely related to the three documents in Category 1. (D.I. 216 at 9-10) For instance, Mr. Eisele's deposition testimony on the Category 1 document entitled Ford Technical Report, "Curvature Control for Enhancing Understeer Performance" confirms that this document describes two controllers, one of which reduces engine torque. (*Id.*, Ex. 13 at 134:3-136:23) The Category 2 document called "ETR Logic Description" was similarly authored by Mr. Eisele and covers the same subject matter.

12. Plaintiff argues that discovery on the Category 2 ETR Logic Description document ending in Bates number 5506 is nonetheless critical because Plaintiff has reason to believe that the date on the face of the document is wrong, and the document does not actually predate the 2004 priority date of the Asserted Patents. (D.I. 200 at 10) This confusion began with Mr. Eisele's deposition testimony that the Category 1 document ending in Bates number 6136 had an incorrect date and the document did not, in fact, predate the 2004 priority date of the Asserted Patents. (D.I. 202, Ex. G at 131:9-19; 5/24/2023 Tr. at 12:13-16) Mr. Eisele's testimony also calls into question the correct date of the Category 2 ETR Logic Description document, which is similar to the 6136 document and was relied on by Defendant's expert, Dr. Messner, to show that certain limitations of Plaintiff's patents were disclosed in the prior art form of Curve Control. (D.I. 200 at 10-11)

13. Defendant has offered to provide a sworn declaration by Mr. Eisele regarding the correct date of both the 6136 document from Category 1 and the 5506 document from Category 2. (5/24/2023 Tr. at 32:13-33:17, 34:24-35:4) This remedy is sufficient to cure the prejudice to Plaintiff while avoiding the draconian step of striking the evidence or imposing the burden of coordinating a supplemental deposition of Mr. Eisele at this late stage of the proceedings, as suggested by Plaintiff. Defendant shall produce the declaration on or before **June 16, 2023**.

14. Plaintiff has not shown that it suffered prejudice due to Defendant's failure to rely on the Category 3 documents in its invalidity contentions or interrogatory responses. While the timely disclosure of the Ford patents would have allowed Plaintiff to take inventor deposition testimony about the scope of the patents, Plaintiff concedes that previously undisclosed prior art patents "purport to include all relevant disclosures within their four corners[.]" (D.I. 200 at 9, 11) Thus, Plaintiff can refute Defendant's invalidity positions based on the Ford patents without the need for additional deposition testimony. Moreover, Defendant highlights similarities between the Category 3 documents and other similar patents which were the subject of deposition testimony by Mr. Salib and Michael Lopez. (D.I. 216 at 10-11)

15. Finally, Plaintiff has not shown prejudice due to Defendant's failure to timely disclose the Category 4 document entitled "Software Requirements Document, MY2004 Land Rover L319 / L320, ACC3 Controller." At oral argument, Plaintiff conceded that any prejudice resulting from the late disclosure of this document is minimal in comparison to the other categories of documents pertaining to Curve Control, and Plaintiff's motion to strike this document is therefore "ancillary." (5/24/2023 Tr. at 22:13-23:9) The record indicates that Defendant disclosed the Delphi Forewarn ACC1 system in the invalidity contentions served on May 28, 2021, and Plaintiff does not deny that it was on notice of Defendant's reliance on prior

art ACC systems. (D.I. 216, Ex. 3, App'x A at 2; D.I. 200 at 12 n.3) On this record, Plaintiff has not shown prejudice resulting from the Messner Report's reliance on the Category 4 document. *See HSM Portfolio LLC v. Elpida Memory Inc.*, C.A. No. 11-770-RGA, 2016 WL 552543, at *1 (D. Del. Feb. 11, 2016) (denying motion to strike reference disclosed in expert report that was used in a manner consistent with invalidity contentions).

16. Cure for prejudice. Having determined that Plaintiff suffered minimal prejudice from the untimely disclosure of the challenged documents for the reasons set forth at ¶¶ 14-15, *supra*, there is no need to cure any prejudice associated with the late disclosure of documents in Categories 3 and 4. *See Allscripts Healthcare, LLC v. Andor Health, LLC*, C.A. No. 21-704-MAK, 2022 WL 3021560, at *39 (D. Del. Jul. 29, 2022). With respect to the documents in Categories 1 and 2, Plaintiff's request for another deposition of Mr. Eisele is denied without prejudice due to the advanced stage of the case and the narrowed issue of establishing the accuracy of the dates for the Category 1 document ending in 6136 and the Category 2 document ending in 5506. Any prejudice resulting from Plaintiff's inability to depose Mr. Eisele on the correct date of documents in Categories 1 and 2 can be cured by Mr. Eisele's submission of a sworn declaration for the reasons set forth in ¶ 13, *supra*. Consequently, this factor weighs against striking the challenged evidence.

17. Disruption of trial. The third *Pennypack* factor is also inapplicable under the circumstances presented here. Having determined that the late disclosure of the challenged documents results in little to no prejudice to Plaintiff, the court finds no need for extensive fact discovery which might otherwise disrupt the trial schedule. Neither party suggested at oral argument that a limited declaration by Mr. Eisele would disrupt the trial schedule. This factor therefore weighs against granting Plaintiff's motion to strike.

18. *Bad faith or willfulness.* Plaintiff argues that Defendant's late disclosure of the sixteen documents was willful because Defendant was aware of the challenged references and chose not to include them in the invalidity contentions. (D.I. 200 at 13) But Defendant attributes the timing of the disclosures to Plaintiff's shifting sands approach to its infringement allegations regarding the Curve Control system in the Shaver Report. (D.I. 216 at 19) For the reasons described at ¶¶ 10 to 15, *supra*, Defendant previously disclosed its reliance on references directly related to the newly disclosed documents. These facts do not support an inference of Defendant's bad faith. Consequently, the fourth *Pennypack* factor weighs against exclusion.

19. *Importance of the evidence.* Finally, Plaintiff suggests that the sixteen untimely documents are not of critical importance to Defendant's invalidity case because Defendant timely identified more than 150 prior art references and would have done the same with these documents if they were crucial to Defendant's allegations of invalidity. (D.I. 200 at 14) Defendant responds that excluding the challenged documents would prevent it from rebutting Plaintiff's new infringement theories introduced for the first time in the Shaver Report. (D.I. 216 at 19) This factor does not weigh heavily for or against exclusion. On balance, however, the *Pennypack* factors weigh against excluding the sixteen documents and the corresponding paragraphs of the Messner Report. Consequently, Plaintiff's motion to strike is DENIED.

II. Defendant's Motion to Strike Portions of the Opening Expert Report of Gregory Shaver, Ph.D.

20. In support of its motion to strike portions of Plaintiff's opening expert report on infringement, Defendant argues that the Shaver Report asserts: (1) new claim constructions for the terms "said controller" in claims 10 and 12 of the '416 patent and "obtaining" in the preamble of claim 5 of the '475 patent and claim 6 of the '416 patent; and (2) new infringement theories pertaining to (a) the functions of "said controller" performed by the unrelated Curve

Control and Long Range Object Sensor (“LROS”) systems; (b) “obtaining” lateral acceleration by either measuring or calculating; (c) “detecting a change in [the] vehicle lateral acceleration” by comparing a lateral acceleration signal to a threshold; and (d) “exceed[ing] a predetermined limit” as comparing “obtained” lateral acceleration values to a threshold; and (e) direct infringement of the method claims with in-vehicle testing of Curve Control. (D.I. 207 at 3; D.I. 239 at 2-3) At oral argument, Defendant’s counsel collapsed these positions into three main arguments: (1) whether the term “said controller” refers to two separate controllers within the same claim (such as the Curve Control and LROS controllers); (2) whether “detecting a change” in the vehicle’s lateral acceleration involves comparing a lateral acceleration signal to a threshold; and (3) direct infringement of the method claims with in-vehicle testing of Curve Control. (5/24/2023 Tr. at 36:8-37:11, 39:24-40:13, 43:24-45:22) Plaintiff responds that the Shaver Report only provides additional explanation and technical specificity regarding its previously disclosed infringement theories. (D.I. 229 at 1)

21. Claim construction of “said controller.” The first two infringement theories Defendant moves to strike from the Shaver Report involve matters of claim construction: (1) Dr. Shaver construes “said controller” to cover different accused controllers in different limitations of claims 10 and 12 of the ’416 patent; and (2) Dr. Shaver construes the preamble term “obtaining a vehicle lateral acceleration” to cover “calculating” lateral acceleration, when Plaintiff previously argued that the preamble was nonlimiting. (D.I. 207 at 9-13) According to Plaintiff, Dr. Shaver applies only the plain and ordinary meaning of the claim terms and does not engage in claim construction. (D.I. 229 at 6-9)

22. “At trial, parties may introduce evidence as to the plain and ordinary meaning of terms not construed by the Court to one skilled in the art, so long as the evidence does not

amount to arguing claim construction to the jury.” *EMC Corp. v. Pure Storage, Inc.*, C.A. No. 13-1985-RGA, 2016 WL 775742, at *4 (D. Del. Feb. 25, 2016) (quoting *MediaTek Inc. v. Freescale Semiconductor, Inc.*, 2014 WL 971765, at *4 (N.D. Cal. Mar. 5, 2014)). When an expert cites to embodiments in the patent specification to support an opinion regarding the plain and ordinary meaning of claim terms, this “amount[s] to claim construction and suggest[s] that literal infringement can be established by a comparison between accused products and specification embodiments.” *Id.* The Shaver Report relies on the embodiment illustrated at Figure 2 of the Asserted Patents and other descriptions in the patent specification to support Dr. Shaver’s understanding of the term “said controller.” (See, e.g., D.I. 207, Ex. 1 at ¶¶ 220-21) By citing the specification as a basis for his proposed plain and ordinary meaning of the claim term, Dr. Shaver has engaged in claim construction. See *D&M Holdings, Inc. v. Sonos, Inc.*, C.A. No. 16-141-RGA, 2018 WL 734649, at *1 (D. Del. Feb. 6, 2018) (explaining that an expert witness “cannot do claim construction. Only the court can.”).

23. Moreover, Plaintiff’s theory on the meaning of “said controller” in the Shaver Report is inconsistent with the position taken in its infringement contentions. Unlike the Shaver Report, Plaintiff’s infringement contentions do not contemplate that the functions of “said controller” in claims 10 and 12 of the ’416 patent can be satisfied by Curve Control and LROS, two different controllers from unrelated systems. (Compare D.I. 230, Ex. G at B-65 to 77, with D.I. 207, Ex. 1 at ¶¶ 217-18, 269, 297-98)⁴ The parties’ dispute about whether references to

⁴ In the ’416 patent at claim limitation 10[c], the contentions identify one of three possible controllers as the “said controller” and do not map “said controller” in limitations 10[d] and [e] to a particular controller. (D.I. 230, Ex. G at B-65 to B-90; D.I. 207, Ex. 2 at B-77 to B-84; D.I. 229 at 7-8; D.I. 239 at 4) Defendant argues that Plaintiff’s contentions did not disclose the interpretation of “said controller” set forth in the Shaver Report, namely, that “a controller” can not only be “one or more” controllers, but also that the “said controller” of claim limitation 10[c] and [d] is a different “said controller” than the “said controller” of 10[e]. In summary,

“controller” in claim 10 of the ’416 patent may refer to different controllers in different limitations of the same claim is a matter requiring supplemental claim construction.

24. Although Defendant was deprived of the opportunity to seek claim construction on the term “said controller” during the *Markman* process, this prejudice can be cured if the court elects to engage in limited supplemental claim construction. *See D&M Holdings*, 2018 WL 734649, at *2; *see also Cadence Pharms., Inc. v. Agila Specialties Inc.*, C.A. No. 14-1225-LPS *et al.*, 2017 WL 39560, at *2 (D. Del. Jan. 4, 2017) (denying motion *in limine* to preclude a belated claim construction and permitting parties to use trial time to present evidence and argument on claim construction). If the court elects to construe the term “a controller” / “said controller,” there is adequate time to complete it without delaying the trial in this case because briefing on case dispositive motions has just begun and about six months remain before trial.

25. The remaining *Pennypack* factors regarding alleged bad faith by Plaintiff and the importance of the evidence sought to be excluded do not shift the balance in favor of striking the select portions of the Shaver Report in the absence of a construction of the term “said controller.” Accordingly, Defendant’s motion to strike the Shaver Report’s construction and theory that “said controller” may be multiple different controllers in different limitations of the same patent claim is denied without prejudice. *See D&M Holdings*, 2018 WL 734649, at *2 (striking claim constructions from expert report and reserving decision on whether to strike additional opinions until terms are construed). Should the court elect to engage in supplemental claim construction, and depending on the outcome of that process, the District Judge may choose to strike portions of the Shaver Report.

Defendant’s position is that nothing in the contentions discloses Plaintiff’s intent to map “said controller” in one claim limitation to one of three possible controllers and “said controller” in the same claim to an entirely different device, LROS.

26. Claim construction of “obtaining.” Defendant also challenges Dr. Shaver’s opinion on the preamble language “obtaining a vehicle lateral acceleration.” Plaintiff’s infringement contentions stated that the preamble language was not limiting and described lateral acceleration as a value measured or calculated by a sensor. (D.I. 207, Ex. 2 at A-1, A-3, A-4, B-2) But the Shaver Report states for the first time that the preamble language “obtaining a vehicle lateral acceleration” means either “measuring” the value from an instrument or sensor collecting lateral acceleration data one hundred times per second, or “calculating” lateral acceleration by comparing a lateral acceleration value to a threshold. (*Id.*, Ex. 1 at ¶ 151)

27. Consistent with the court’s ruling on the Shaver Report’s interpretation of the term “said controller,” the court finds that any prejudice suffered by Defendant from Plaintiff’s change in position on the meaning and significance of the preamble language “obtaining a vehicle lateral acceleration” can be cured if the court elects to engage in limited supplemental claim construction. *See D&M Holdings*, 2018 WL 734649, at *2; *see also Cadence Pharms.*, 2017 WL 39560, at *2. Any supplemental claim construction is not likely to disrupt the trial schedule. Consistent with the court’s analysis at ¶¶ 24-25, *supra*, the court finds that the *Pennypack* factors weigh against striking the challenged portions of the Shaver Report at this time.

28. Threshold comparison “detecting a change” theory. Defendant alleges that the Shaver Report introduces a new theory of infringement regarding claim 1[c] of the ’475 patent, which requires “detecting a change in the vehicle lateral acceleration.” (D.I. 207 at 13-14) Specifically, Defendant contends that Plaintiff’s infringement contentions showed how Curve Control uses running sensor input to measure changes in lateral acceleration one hundred times per second, whereas the Shaver Report discloses a comparison between a lateral acceleration

value and a predetermined threshold. (*Id.*; Ex. 1 at ¶ 114; 5/24/2023 Tr. at 40:1-22) Defendant represents that it “might have considered further investigation and discovery of the accused Curve Control functionality, including additional pseudocode, algorithms, or source code, to rebut [Plaintiff’s] contentions with tailored non-infringement and invalidity positions” had Plaintiff’s theory been timely disclosed. (D.I. 207 at 16) Plaintiff characterizes the challenged portion of the Shaver Report as providing additional detail regarding the nature of the calculations, stressing that this information was already known to Defendant. (D.I. 229 at 10)

29. There appears to be no dispute that Plaintiff’s infringement contentions did not specifically address a calculation of changes in vehicle lateral acceleration using a comparison of lateral acceleration values to a predetermined threshold. Nonetheless, the *Pennypack* factors do not support striking paragraph 114 of the Shaver Report. Defendant has not specifically identified any Curve Control discovery which would be critical to its response but has not yet been produced. Any prejudice is minimized by the fact that Defendant has since had an opportunity to serve a rebuttal report and depose Dr. Shaver. (D.I. 204; D.I. 234; D.I. 235); *see Finjan, Inc. v. Rapid7, Inc.*, C.A. No. 18-1519-MN, 2020 WL 5798545, at *4 (D. Del. Sept. 29, 2020) (finding prejudice was “partially curable through responsive expert reports and expert depositions”). Defendant has not shown that any of the circumstances surrounding this issue would require postponing the upcoming trial, nor has Defendant demonstrated bad faith on the part of Plaintiff. Defendant’s motion to strike paragraph 114 of the Shaver Report is therefore denied.

30. **“Reducing the speed” theory.** Defendant argues that the Shaver Report relies on a calculated lateral acceleration value used in a Curve Control feature to support Plaintiff’s theory of infringement for claim 5 of the ’475 patent. (D.I. 207 at 14) Whereas Plaintiff’s infringement

contentions generally described a “Curvature Control” function determining a braking request, Defendant contends that the Shaver Report relies on a comparison of two lateral acceleration values with a calibratable threshold to satisfy the “reducing the speed” step of claim 5. (*Id.*) Plaintiff responds that its infringement contentions identified the Curve Control feature of the accused vehicles as the means of reducing vehicle speed and cited the same document in both its contentions and the Shaver Report, FORD_CARRUM000735390, in support of its position. (D.I. 229 at 10-11)

31. Defendant’s motion to strike the Shaver Report’s infringement position on the claimed step of “reducing the speed if the vehicle lateral acceleration exceeds a predetermined limit” is denied. (D.I. 207, Ex. 1 at ¶¶ 139-45) Plaintiff’s infringement contentions disclose that the “curvature control” feature of the accused vehicles functions to reduce the vehicle speed if the lateral acceleration exceeds a predetermined limit:

'475 Patent Claim Language	Infringement Analysis												
	<div data-bbox="753 1157 1141 1423" data-label="Figure"> <table border="1"> <caption>Data points for Figure 12</caption> <thead> <tr> <th>Lateral Acceleration (m/s²)</th> <th>Resume Gain Scale Factor</th> </tr> </thead> <tbody> <tr> <td>-10</td> <td>1.0</td> </tr> <tr> <td>-5</td> <td>0.0</td> </tr> <tr> <td>0</td> <td>0.0</td> </tr> <tr> <td>5</td> <td>0.0</td> </tr> <tr> <td>10</td> <td>1.0</td> </tr> </tbody> </table> </div> <p data-bbox="732 1440 1162 1461">Figure 12: Resume inhibit function for the 2000MY XKR</p> <p data-bbox="488 1499 1427 1602">The “curvature control” feature of each of the accused vehicles further functions to reduce the vehicle speed if the vehicle lateral acceleration exceeds a predetermined limit. FORD_CARRUM000730136; FORD_CARRUM000735390; FORD_CARRUM000104309. This limit is set in order to “limit uncomfortable lateral acceleration levels”:</p>	Lateral Acceleration (m/s ²)	Resume Gain Scale Factor	-10	1.0	-5	0.0	0	0.0	5	0.0	10	1.0
Lateral Acceleration (m/s ²)	Resume Gain Scale Factor												
-10	1.0												
-5	0.0												
0	0.0												
5	0.0												
10	1.0												

(D.I. 230, Ex. G at A-37) One of the documents cited by Plaintiff in support of this position (FORD_CARRUM000735390) describes the logic of the Curve Control algorithm in pseudo code and includes a term for the predetermined limit for lateral acceleration:

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{
  if ( (1st_ARBTR.YTC_TRQ_REDUX_ACTIVE)&& (FLTRD_ENGN_TRQ_RDX_ERR < 0)
      && ( min(ABS(FLT_LAT_ACC),IABS(WZ_CROSS_VX * (1.2 )) >= MIN_LAT_ACC_CCETR )
  )    /*enter control*/
  {

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(D.I. 207, Ex. 1 at ¶ 140; excerpt from FORD_CARRUM000735390 at -402) Contrary to Defendant's position that Plaintiff "never pointed to this until [the] expert report," Plaintiff's infringement contentions described a predetermined limit and cited this specific pseudo code. (5/24/2023 Tr. at 27:22-28:3) Thus, the Shaver Report provides additional explanation for, and interpretation of, a document expressly cited in Plaintiff's infringement contentions. It does not disclose a new theory of infringement.

32. Theory of direct infringement by vehicle testing. Finally, Defendant argues that the Shaver Report introduces a new direct infringement theory regarding claim 6 of the '416 patent and claim 5 of the '475 patent based on Defendant's performance of in-vehicle testing to test and tune the Curve Control capabilities of the vehicles. (D.I. 207 at 14-15; Ex. 1 at ¶¶ 100, 154) Defendant explains that vehicle testing was never identified in Plaintiff's infringement contentions on direct infringement, and Plaintiff did not narrow its method claim assertions to claim 5 of the '475 patent and claim 6 of the '416 patent until the Shaver Report. (*Id.*)

33. Defendant does not identify any specific additional discovery it needs to respond to the direct infringement allegations in the Shaver Report, and Defendant's allegations of prejudice do not pertain to Plaintiff's vehicle testing theory. (D.I. 207 at 17-18) At oral argument, Defendant conceded that its prejudice is limited to the inability to present an affirmative argument supported by evidence in case dispositive motions. (5/24/2023 Tr. at 58:18-59:9) Defendant has identified only slight prejudice, no basis for a cure, and no risk of disruption to the case schedule.

34. Defendant's allegations of bad faith focus on the timing of Plaintiff's decision to drop the majority of the asserted patent claims in the Shaver Report. (D.I. 207 at 18-19) This case narrowing is separate from the allegedly new infringement theories asserted by Plaintiff in the Shaver Report. Any prejudice resulting from the three-week delay between completion and service of the Shaver Report has been cured by Plaintiff's agreement to an extension for Defendant to serve an amended opening expert report. (D.I. 194) Consequently, this factor does not weigh in Defendant's favor in the *Pennypack* analysis. For these reasons, Defendant's motion to strike Plaintiff's theory of direct infringement based on Defendant's vehicle testing is denied.

35. Conclusion. For the foregoing reasons, IT IS ORDERED that: (1) Plaintiff's motion to strike is DENIED (D.I. 199); and (2) Defendant's motion to strike is DENIED (D.I. 206). On or before **June 16, 2023**, Defendant shall serve the declaration of Mr. Eisele as described at ¶ 13, *supra*. This ruling is made without prejudice to Defendant to request leave to pursue limited supplemental claim construction.

36. Given that the court has relied upon material that technically remains under seal, the court is releasing this Memorandum Order under seal, pending review by the parties. In the unlikely event that the parties believe that certain material in this Memorandum Order should be redacted, the parties shall jointly submit a proposed redacted version by no later than **June 20, 2023**, for review by the court, along with a motion supported by a declaration that includes a clear, factually detailed explanation as to why disclosure of any proposed redacted material would "work a clearly defined and serious injury to the party seeking closure." *See In re Avandia Mktg., Sales Practices & Prods. Liab. Litig.*, 924 F.3d 662, 672 (3d Cir. 2019) (quoting *Miller v. Ind. Hosp.*, 16 F.3d 549, 551 (3d Cir. 1994) (internal quotation marks omitted)). If the

parties do not file a proposed redacted version and corresponding motion, or if the court determines the motion lacks a meritorious basis, the documents will be unsealed within fourteen (14) days of the date the Memorandum Order issued.

37. This Memorandum Order is filed pursuant to 28 U.S.C. § 636(b)(1)(A), Fed. R. Civ. P. 72(a), and D. Del. LR 72.1(a)(2). The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Memorandum Order. Fed. R. Civ. P. 72(a). The objections and responses to the objections are limited to ten (10) pages each.

38. The parties are directed to the court's Standing Order For Objections Filed Under Fed. R. Civ. P. 72, dated March 7, 2022, a copy of which is available on the court's website, www.ded.uscourts.gov.


Sherry R. Fallon
United States Magistrate Judge