IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF UTAH NORTHERN DIVISION

ROBERT H. PETERSEN, et al.,

Plaintiffs,

VS.

DAIMLER CHRYSLER CORPORATION, et al.,

Defendants.

ORDER AND MEMORANDUM DECISION Case No. 1:06-CV-00108-TC

This matter comes before the court on the motion in limine filed by Defendant Cooper Tire and Rubber (Cooper) to exclude testimony by Plaintiffs' expert witness, Troy Cottles, on the finite element modeling report. On June 3, 2011, the court held a hearing to determine whether Mr. Cottles qualifies as an expert under Rule 702 of the Federal Rules of Evidence and <u>Daubert</u> <u>v. Merrill Dow Pharmaceuticals, Inc.</u>, 509 U.S. 579 (1993) on the issue of finite element modeling and whether Rule 703 permits Mr. Cottles to provide an opinion based on the finite element report prepared by another person. Having considered the record established in pleadings and at the hearing, as well as pertinent law, the court holds that (1) Mr. Cottles does not qualify as an expert witness in the area of finite element modeling, and (2) Mr. Cottles may not adopt the results contained in the finite element modeling report as a basis for his opinion. Accordingly, the court GRANTS IN PART Cooper's motion in limine and excludes any testimony by Mr. Cottles involving the finite element modeling report.¹

In the same motion, Cooper also asks the court to strike the supplemental reports of Mr. Cottles and Dennis Carlson. This portion of Cooper's motion is DENIED AS MOOT based on the court's previous rulings on adjustment and claims data (Dkt. Nos. 539, 562, and 764) and the court's ruling on Mr. Cottles's ability to testify about the finite element modeling report.

BACKGROUND

Mr. Cottles's Proffered Opinions Regarding Finite Element Modeling

Plaintiffs seek to introduce testimony of Mr. Cottles that a finite element modeling (FEM)² report demonstrates that the subject Cooper tire had a design defect and that Plaintiffs' proposed design changes would have made the tire safer. The FEM report that Mr. Cottles relies on was prepared by Don Lee. Mr. Lee has not been designated as an expert in this case. Rather, Mr. Lee prepared the FEM report at Mr. Cottles's request.

One of Mr. Cottles's proffered opinions is that incorporating his three recommended modifications to the subject tire--adding a belt wedge gum strip, adding a nylon overlay, and widening the belts--results in a reduction of belt edge strain density, which makes the subject tire safer. To support this opinion, Mr. Cottles asked Mr. Lee to "look at those three criteria and

¹This does not affect Mr. Cottles's ability to testify about his tire failure opinions formed independent of the finite element modeling report. It only excludes testimony about or giving an opinion based on finite element modeling.

²The court will use "FEM" to refer to finite element modeling, which is also known as "finite element analysis." FEM testing is a way to model stresses on a hypothetical tire depending on a number of variables and parameters. As an initial matter, the person operating the program must select and input variables into complex mathematical equations generated by a computer program. It is then possible to simulate the stresses placed on a tire under different scenarios. The results depend on the many input values programed into the model.

establish those and then . . . run the Finite Element Model . . . and run numbers on what the belt edge strain density would be." (Cottles's Dep. [Ex. A to Dkt. No. 541] 197:10-14.) Aside from providing the three criteria, Mr. Cottles did not participate in preparing the FEM report, does not have the actual model that was created, does not know what raw data Mr. Lee used, and has done little to test or confirm Mr. Lee's results. (<u>Id.</u> at 203-06.) Mr. Cottles's conclusions based on the FEM report are derived solely from the information contained in the fourteen-page report produced by Mr. Lee.

Mr. Cottles's and Mr. Carlson's Supplemental Reports

On October 27, 2010, Mr. Carlson submitted a supplement to his amended report and Mr. Cottles submitted a supplement to his "second supplemented tire failure analysis report." Both supplements contain identical language indicating: (1) that the experts have reviewed Cooper's claims data and the data reflects a high rate of claims for tires manufactured to the 5015 green tire specification; and (2) that the experts have reviewed Cooper's claims data for all steel belt radial tires and the claims data reinforces Cooper's awareness of a tread belt separation problem. Mr. Cottles's supplement contains an additional paragraph indicating that the FEM report supports his opinion that the subject tire is defective and that his proposed modifications would reduce the risk of belt separation.

ANALYSIS

Mr. Cottles's Proffered Opinions Regarding Finite Element Modeling

1. Mr. Cottles's Qualification to Testify Under Rule 702

Cooper contends that Mr. Cottles is not qualified as an expert in FEM and cannot merely serve as a conduit for Mr. Lee's report.

Standards Governing Admissibility of Expert Witness Testimony and Reports

Under the Federal Rules of Evidence, "[i]f scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case." Fed. R. Evid. 702.

Under the evidentiary rule, the court's inquiry is twofold. First, the court must determine whether the witness is qualified as an expert in the area about which he will testify. <u>United States v. Nacchio</u>, 555 F.3d 1234, 1241 (10th Cir. 2009). At the heart of this determination is the expert's foundation for the testimony. <u>See Lifewise Master Funding v. Telebank</u>, 374 F.3d 917, 928 (10th Cir. 2004). The fact that "a witness can parrot the <u>results</u> of a model does not mean that he is qualified to explain how the model works or to opine on the statistical validity or interpretation of the results." <u>Id.</u> Second, the court must determine whether the expert opinion is relevant and reliable. Daubert v. Merrill Dow Pharms., Inc., 509 U.S. 579, 589 (1993).

Mr. Cottles Lacks the Qualifications of an Expert Witness on FEM

Mr. Cottles offers his opinion that the FEM report shows the subject Cooper tire had a design defect and could have been made safer by incorporating his proposed design changes, but Plaintiffs have not demonstrated that Mr. Cottles has the knowledge, skill, experience, training, or education to offer this opinion. Although Mr. Cottles is qualified as a tire failure expert, his opinion on the FEM report falls outside of that expertise. As a result, he appears to be doing nothing more than parroting the results of Mr. Lee's report.

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Mr. Cottles acknowledges that defining the appropriate variables to produce the desired output requires some degree of expertise (Hr'g Tr. 156:22-157:5, June 3, 2011) and admits that he does not have this expertise (id. at 150:19-21). His testimony reveals that he has only limited experience with FEM programming and analysis. While previously working in the tire industry, Mr. Cottles was exposed to, and on occasion used, a "rudimentary" FEM program. (Id. at 156:8-11.) But most of his familiarity with FEM was derived from reviewing reports created by an inhouse group of technicians trained in FEM programming. These technicians would select and input data into the program to create reports for review by employees such as Mr. Cottles.

Mr. Cottles's limited experience in reviewing in-house FEM reports differs markedly from his adoption of the results of Mr. Lee's report and does not qualify him as an expert in FEM. In Mr. Cottles's former review of in-house reports, not only were the technicians who created the reports working under the direction and control of Mr. Cottles's company, but Mr. Cottles also enjoyed the benefit of having the employees available to explain the details of how the reports were created. Here, Mr. Cottles had neither of these safe-guards. Although Mr. Lee was working for Mr. Cottles, Mr. Cottles had no direct control over Mr. Lee's work; he simply identified the suggested modifications that he wanted Mr. Lee to test. And Mr. Cottles accepted the conclusions reached in the report without the benefit of any explanation from Mr. Lee on the details of how he created the report.

Although Mr. Cottles may be able to parrot the results contained in Mr. Lee's FEM report, he is not qualified to explain how the FEM model works or to offer an opinion on the statistical validity or interpretation of the results. <u>See Lifewise</u>, 374 F.3d at 928 (excluding expert testimony on a damages model because the purported expert was "not an expert in damages

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analysis or in any of the techniques used to create the . . . damages model," he had "never used the methods used to create the . . . damages model" himself, he confessed that he was not a damages modeler, and he had no training in damages analysis); <u>see also TK-7 Corp. v. Barbouti</u>, 993 F.2d 722, 728 (10th Cir. 1993) (affirming exclusion of witness who was not qualified as an expert); <u>Broadcort Capital Corp. v. Summa Med. Corp.</u>, 972 F.2d 1183, 1195 (10th Cir. 1992) (holding that witness with some general experience and education in the field lacked sufficient qualifications to qualify as expert in the area).

Mr. Cottles Lacks Sufficient Information to Determine the Reliability of the FEM Report

Mr. Cottles also lacks an independent and complete understanding of the process Mr. Lee used to produce the FEM report at issue. During his testimony, Mr. Cottles could not identify the specific program that Mr. Lee had used, the number of properties required to create the FEM report, and the data that Mr. Lee had input into the program. Mr. Cottles acknowledged that his belief in the accuracy of the report is based on the fact that the results are consistent with what he would expect them to be. And aside from comparing the anticipated results with Mr. Lee's actual results, Mr. Cottles cannot test the accuracy of the FEM report. As a result of Mr. Cottles's limited understanding of the FEM report, the court cannot determine whether the report is based on sufficient facts and data, whether the principles and methods used were reliable, and whether those principles and methods were applied reliably to the facts in this case.

Because Mr. Cottles lacks knowledge, skill, experience, training, and education in FEM analysis, the court finds that Mr. Cottles is not qualified as an expert under Rule 702 to testify about the FEM report. Further, the court finds that Mr. Cottles does not possess sufficient information about how the FEM report at issue was created to allow the court to evaluate the

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reliability of his FEM opinions. Accordingly, Cooper's motion is GRANTED IN PART--Mr. Cottles may not present expert opinion testimony under Rule 702 on FEM.

2. Mr. Cottles's Ability to Rely on the FEM Report as a Basis for His Opinion Under Rule 703

Under Rule 703, an expert is allowed "to base an opinion on facts or data not admissible in evidence if of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject."³ <u>TK-7 Corp. v. Estate of Barbouti</u>, 993 F.2d 722, 732 (10th Cir. 1993). But "[f]acts or data that are otherwise inadmissible shall not be disclosed to the jury . . . unless . . . their probative value . . . substantially outweighs their prejudicial effect." Fed. R. Evid. 703.

Mr. Cottles Is Not Sufficiently Familiar With FEM to Base His Opinion on the Report

When a testifying expert relies upon another's conclusions, facts, or data, the expert must have a familiarity with the methods or reasoning used. <u>See TK-7 Corp.</u> 993 F.2d at 732; <u>Dura</u> <u>Auto. Sys. of Indiana v. CTS Corp.</u>, 285 F.3d 609, 614 (7th Cir. 2002) ("A scientist, however well credentialed he may be, is not permitted to be a mouthpiece of a scientist in a different specialty."). In <u>TK-7 Corp.</u>, the court excluded the testimony of a professed expert after he had submitted an opinion to the court assuming the validity of projections made by another person "despite the fact that [the expert] knew little to nothing at all about [the person who made the projections]." 993 F.2d at 732. Similarly, in <u>Dura Automotive</u>, the court excluded a witness's testimony based on another's conclusions because the witness lacked the necessary expertise to determine whether appropriate methods were used in a complex groundwater model that

³The contents of the FEM report are hearsay and inadmissible under Rule 802 of the Federal Rules of Evidence.

"require[d] the exercise of sound technical judgment in evaluating all available geotechnical data to determine what input values should be used with respect to each parameter utilized." 285 F.3d at 614.

Here, Mr. Cottles seeks to base⁴ his opinion that the safety of the subject tire would be improved by adding a belt wedge gum strip, adding a nylon overlay, and widening the belts on the results of Mr. Lee's FEM report. Though Mr. Cottles said he was familiar with FEM reports when he worked in the industry in that they were "available" to him, he is not familiar enough to independently create FEM reports. (Hr'g Tr. 150:22-23.) During his deposition and the June 3 hearing, Mr. Cottles could not provide the input data the Mr. Lee used to construct the FEM report. And, as stated above, Mr. Cottles could not confirm that Mr. Lee's FEM report was accurate or that the methods used were reliable. Furthermore, Mr. Cottles's expressed familiarity with Mr. Lee's credentials as an expert (i.e., that Mr. Lee has fifteen years experience in the tire industry, was a former employee of Hankook Tires, presented a seminar at the Hazard Information Foundation Incorporated conference, and authored a "peer-reviewed" paper⁵ published on the internet) does not reassure the court that Mr. Cottles is sufficiently familiar with Mr. Lee or his qualifications as a reliable expert.

Accordingly, the court finds that Mr. Cottles does not have the requisite familiarity, knowledge, or technical judgment of the methods or reasoning applied by Mr. Lee to be allowed

⁴It is unclear whether Mr. Cottles seeks to base his opinion on the FEM report or whether he seeks to bolster his pre-existing opinion with the report.

⁵At the hearing, Mr. Cottles stated that Mr. Lee's paper was peer-reviewed but could not provide any further information on the subject.

to present opinions based on the FEM report to the jury. If Mr. Cottles did so, he would effectively be serving as nothing more than a mouthpiece for Mr. Lee.

Mr. Cottles May Not Disclose the FEM Report to the Jury

In addition, Mr. Cottles seeks to present the FEM report to the jury. But because Mr. Cottles lacks sufficient familiarity with the report for him to base his opinions on it, he may not disclose the report to the jury. Even if Mr. Cottles could base his opinions on the report, the court cannot allow the presentation of the FEM report to the jury unless its "probative value . . . substantially outweighs their prejudicial effect." Fed. R. Evid. 703. Because Mr. Cottles is an undisputed expert in tire failure analysis, and Mr. Lee's FEM report would merely reinforce Mr. Cottles's previously constructed conclusions, the admission of the FEM report would not provide significant probative value compared to the prejudicial effect of allowing an absent "expert's" testimony without allowing Cooper to cross-examine the expert.

Because Mr. Cottles lacks sufficient familiarity, knowledge, and technical judgment of the methods or reasoning applied by Mr. Lee, he may not rely on the FEM report under Rule 703 as a basis for his expert opinion. As a result, Mr. Cottles may not submit the FEM report to the jury. Accordingly, Cooper's motion is GRANTED IN PART--the FEM report and any opinion based upon the report are inadmissible under Rule 703.

3. Designating Mr. Lee as an Expert Witness

During the June 3 hearing, Plaintiffs suggested that if Mr. Cottles is unable to testify as an expert on FEM or to base his opinions on the FEM report, Plaintiffs should be allowed to designate Mr. Lee as an expert witness. But it is simply too late to allow Plaintiffs to do so. Plaintiffs' deadline for designating expert witnesses passed on December 21, 2009. (Dkt. No.

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282.) And Plaintiffs have known about Mr. Lee's FEM report since at least September 28, 2010. Despite this, Plaintiffs have made no attempt to designate Mr. Lee until the June 3 hearing, during which they offered the designation in light of the possibility that the FEM report would be excluded in its entirety.

The court finds that allowing Plaintiffs to designate Mr. Lee as an expert witness would be prejudicial to Cooper, who perhaps has foregone the possibility of seeking out supplemental experts because of the deadline imposed in Judge Warner's August 3, 2009, scheduling order (Dkt. No. 282). And the court refuses to set a precedent that parties can ignore such important discovery deadlines at this late stage in the proceedings simply because it would strengthen their case to do so. If the court were to so allow, there would be little to prevent parties from adding newly discovered experts until only months or days before trial, preventing cases from moving forward at a reasonable pace.

Mr. Cottles's and Mr. Carlson's Supplemental Reports

The court DENIES IN PART AS MOOT Cooper's motion based on the court's previous rulings and the court's decision on Mr. Cottles's ability to testify about FEM. To the extent that Mr. Cottles's and Mr. Carlson's supplemental reports are based on a review of Cooper's adjustment and claims data, the court's previous rulings on the admissibility of such data (Dkt. Nos. 539, 562, and 764) render Cooper's motion moot. And to the extent that Mr. Cottles's supplemental report is based on his review of the FEM report, the court's decision today on Mr. Cottles's ability to testify about the FEM report renders Cooper's motion moot.

CONCLUSION

For the foregoing reasons, the court GRANTS IN PART and DENIES IN PART AS

MOOT Cooper's motion (Dkt. No. 532). Mr. Cottles may not offer expert opinion testimony

about the FEM report and may not rely on the report as a basis for his expert opinions.

SO ORDERED this 22nd day of June, 2011.

BY THE COURT:

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TENA CAMPBELL United States District Judge