US Court of Federal Claims Judicial Conference, Oct. 20, 2022

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Rule 702. Testimony by Expert Witnesses [changes effective Dec. 2022 in bold]

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise **if the proponent has demonstrated by a preponderance of the evidence that**:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the ~~**expert has reliably applied**~~ **expert's opinion reflects a reliable application of** the principles and methods to the facts of the case.

VOLOKH CONSPIRACY BLOG:

[David Bernstein, July 6, 2006 at 3:38pm] Trackbacks
More on Daubert and Rule 702:

I've noted before that many federal courts are ignoring the language of amended Federal Rule of Evidence 702, and relying on selective quotes from earlier precedents to evade their gatekeeping responsibilities. An excellent example just came across my desk, *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209 (Fed. Cir. 2006).

A few interesting, and disturbing, things about this opinion:

(1) The court never cites the text of Rule 702, or, for that matter, shows an awareness that Rule 702, as amended in 2000, is the governing rule for the admissibility of expert testimony;

(2) The court cites the 1993 *Daubert* opinion as the apparent last word on the scope of Rule 702, even though Daubert was only the first in a trilogy of relevant cases ending in 1999, and Rule 702 was amended in 2000 to codify what amounts to a strict interpretation of all three opinions, resolving certain ambiguities in the trilogy in favor of a conservative admissiblity standard;

(3) A very brief excerpt: "The appellant argued that the expert used incorrect data or was missing data to run the CFD software and used the wrong equations to run his CFD analysis of the engine's aerodynamic properties. Such a flawed analysis, it argued, made the testimony and evidence unreliable." The court concludes that this objection goes to weight, not admissibility, and refuses to review the reliability of the evidence. Yet Rule 702, as amended, specifically states that expert testimony is only admissible if "the witness has applied the principles and methods reliably to the facts of the case." If an expert used incorrect or missing data and the wrong equations in an analysis, it's hard to see how he met the standard imposed by the above language, and the court certainly doesn't explain it.

(4) The court cites *Daubert* for the proposition that "the focus of a court's inquiry into the relevance and reliability of scientific evidence 'must be solely on principles and methodology, not on the conclusions that they generate'", but fails to recognize that, even if one wrongly ignores the text of Rule 702, the 1997 *Joiner* case specified (specifically in response to the misuse of the earlier language in *Daubert*) that "conclusions and methodology are not entirely distinct from one another," and that courts could reject testimony even when based on what, in general, may be a reliable methodology, if it was misused in the case at hand.

(5) The court cites a 1986(!) 8th Circuit opinion for the proposition that if inadequacies in expert testimony, especially if they can be vigorously contested at trial, are a matter of weight, not admissibility. In terms of the evolution of federal expert evidence law, 1986 might as well be 1800.

(6) In fairness, the court cites a favorable 2003 11th Circuit opinion, which unfortunately is equally wrongheaded, showing how judicial error can compound judicial error. The 11th Circuit opinion bizarrely actually does quote the language of amended Rule 702, and then proceeds to completely ignore the requirement that "the witness has applied the principles and methods reliably to the facts of the case." (And the 11th Circuit opinion is also the apparent source of the 1986 citation.)

[Update: A federal district court recently wrote, "Rule 702 of the Federal Rules of Evidence, as discussed and interpreted by the Supreme Court in Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993) and Kumho Tire Co. v. Carmichael, 526 U.S. 137, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999)." It would have been pretty difficult for the USSC to have discussed and interpreted current Rule 702 in these cases, because they were also decided before current Rule 702 existed. I wonder if many federal judges are simply unaware that Rule 702 was amended in 2000. If so, it would behoove attorneys seeking to enforce the Rule to remind them.]

The relevant excerpt of the Federal Circuit opinion can be found below:

Vaughan's challenges to expert testimony and scientific evidence are analyzed under the Supreme Court's Daubert factors. See Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 589, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). When faced with expert scientific testimony, a district court must first determine "whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact at issue." Id. at 592, 113 S.Ct. 2786. This requires an assessment of the reasoning and methodology underlying the testimony to determine whether it is scientifically valid. Id. In Daubert, the Supreme Court set forth four factors for district courts to *1221 consider when evaluating the validity and relevance of scientific evidence pursuant to Rule 702 of the Federal Rules of Evidence. Id. at 592-93, 113 S.Ct. 2786. These factors include (1) whether the methodology can and has been tested, (2) whether the methodology is subject to peer review, (3) the potential rate of error, and (4) the general acceptance of the methodology. Id. at 593-94, 113 S.Ct. 2786. The court further noted that the focus of a court's inquiry into the relevance and reliability of scientific evidence "must be solely on principles and methodology, not on the conclusions that they generate." Id. at 595, 113 S.Ct. 2786. Here, Vaughan's argument focuses on the parameters Lueptow applied, not on the reliability of CFD analysis in general. Indeed, CFD analysis has been previously recognized in the scientific community and has been recognized as reliable by at least one circuit. See Quiet Tech. DC-8, Inc. v. Hurel-Dubois UK Ltd., 326 F.3d 1333, 1343-44 (11th Cir.2003). In Quiet Tech., the appellant challenged the credibility of CFD analysis for modeling aerodynamic properties in a jet engine. Id. at 1344. The appellant argued that the expert used incorrect data or was missing data to run the CFD software and used the wrong equations to run his CFD analysis of the engine's aerodynamic properties. Id. Such a flawed analysis, it argued, made the testimony and evidence unreliable. Id. at 1344-45. The court held that such an attack goes more to the weight of the evidence than to its admissibility. "The identification of such flaws in generally reliable scientific evidence is precisely the role of cross-examination." Id. at 1345; see also In re TMI Litig., 193 F.3d 613, 692 (3d Cir.1999) (" 'So long as the expert's testimony rests upon 'good grounds,' it should be tested by the adversary process-competing expert testimony and active cross-examination-rather than excluded from jurors['] scrutiny for fear that they will not

grasp its complexities or satisfactory [sic] weigh its inadequacies.' " (quoting Ruiz-Troche v. Pepsi Cola of Puerto Rico Bottling Co., 161 F.3d 77, 85 (1st Cir.1998))); Wilmington v. J.I. Case Co., 793 F.2d 909, 920 (8th Cir.1986) ("Virtually all the inadequacies in the expert's testimony urged here by [the defendant] were brought out forcefully at trial •••• These matters go to the weight of the expert's testimony rather than to its admissibility."). Here, Vaughan's challenge goes to the weight of the evidence rather than the admissibility of Lueptow's testimony and analysis. Though he admitted that his models did not exactly match the various accused tanks, this fact was fully discussed on cross examination. As in Quiet Tech., his models were not the perfect models of each individual tank, but they were based on reliable scientific methodology and subject to cross examination and the proffering of further scientific analysis by Vaughan. We conclude that a reasonable juror could consider Lueptow's testimony explaining the very robust, helical flow in the models and infer that the similar accused tanks will produce flow similar to the modeled flow. Therefore, we will not contravene the province of the jury by reweighing Lueptow's testimony.

802 F.3d 1283

United States Court of Appeals, Federal Circuit.

SUMMIT 6, LLC, Plaintiff–Cross Appellant,

v.

SAMSUNG ELECTRONICS CO., LTD., Samsung Telecommunications America, LLC, Defendants–Appellants.

Nos. 2013–1648, 2013–1651

Sept. 21, 2015.

In *Daubert,* the Supreme Court set out the requirements for admissibility of expert testimony. 509 U.S. 579, 113 S.Ct. 2786 (1993). The Supreme Court stated that the trial judge plays a "gatekeeping role," *id.* at 597, 113 S.Ct. 2786, which "entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." *Id.* at 592–93, 113 S.Ct. 2786. The Court emphasized that the focus "must be solely on principles and methodology, not on the conclusions that they generate." *Id.* at 595, 113 S.Ct. 2786. This admissibility assessment, while a flexible one, may consider the following factors: (1) whether the methodology is scientific knowledge that will assist the trier of fact; (2) whether the methodology has been tested; (3) whether the methodology has been published in peer-reviewed journals; (4) whether there is a known, potential rate of error; and (5) whether the methodology is generally accepted. *Id.* at 591–95, 113 S.Ct. 2786.

The admissibility of expert evidence is also governed by Rules 702 and 703 of the Federal Rules of Evidence. "Rule 702 was amended in response to *Daubert* and cases applying it, including *Kumho Tire*." *Micro Chem.,* 317 F.3d at 1391 (citing *Kumho Tire Co. v. Carmichael,* 526 U.S. 137, 150, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999)). Rule 702 states:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods to the facts of the case.

19 This court has recognized that estimating a reasonable royalty is not an exact science. The record may support a range of reasonable royalties, rather than a single value. Likewise, there may be more than one reliable method for estimating a reasonable royalty. *Apple,* 757 F.3d at 1315. A party may use the royalty rate from sufficiently comparable licenses, value the infringed features based upon comparable features in the marketplace, or value the infringed features by comparing the accused product to non-infringing alternatives. *Id.* A party may also use what this court has referred to as "the analytical method," focusing on the infringer's projections of profit for the infringing product. *Lucent Techs.,* 580 F.3d at 1324.

All approaches have certain strengths and weaknesses, and, depending upon the facts, one or all may produce admissible testimony in a particular case. Because each case presents unique circumstances and facts, it is common for parties to choose different, reliable approaches in a single case and, when they do, the relative strengths and weaknesses of each approach may be exposed at trial or attacked during cross-examination. That one approach may better account for one aspect of a royalty estimation does not make other approaches inadmissible.
20 In sum, while all approximations involve some degree of uncertainty, the admissibility inquiry centers on whether the methodology employed is reliable. *Daubert,* 509 U.S. at 589–595, 113 S.Ct. 2786. A distinct but integral part of that inquiry is whether the data utilized in the methodology is sufficiently tied to the facts of the case. *Kumho Tire,* 526 U.S. at 150, 119 S.Ct. 1167. Hence, a reasonable or scientifically valid methodology is nonetheless unreliable where the data used is not sufficiently tied to the facts of the case. *See, e.g., LaserDynamics, Inc. v. Quanta Computer, Inc.,* 694 F.3d 51, 78–81 (Fed.Cir.2012) (granting a new trial because damages testimony relied upon licenses that were not comparable and therefore not relevant). Likewise, ideal input data cannot save a methodology that is plagued by logical deficiencies or is otherwise unreasonable. *See Daubert,* 509 U.S. at 592–93, 113 S.Ct. 2786 (the court must make "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly *can be* applied to the facts in issue) (emphasis added). **But where the methodology is reasonable and its data or evidence are sufficiently tied to the facts of the case**, the gatekeeping role of the court is satisfied, and the inquiry on the correctness of the methodology and of the results produced thereunder belongs to the factfinder.

[*Note the difference between the language of the Rule, "reliably applied to the facts of the case," and the language of the opinion, "sufficiently tied to the facts of the case*]

807 F.3d 1283

United States Court of Appeals, Federal Circuit.

CARNEGIE MELLON UNIVERSITY, Plaintiff–Appellee

v.

MARVELL TECHNOLOGY GROUP, LTD., Marvell Semiconductor, Inc., Defendants–Appellants.

No. 2014–1492

Aug. 4, 2015.

1

18Marvell challenges the admission of the testimony of CMU's damages expert, Ms. Lawton, because in its view she lacks relevant expertise and disregarded evidence that Marvell believes favored its much lower damages estimate. Ms. Lawton filed voluminous, thorough, clearly structured, comprehensively documented expert reports. The district court conducted an extended live preview of her testimony and determined that she was qualified and her methodology was sound. We review the admission of her testimony for an abuse of discretion. General Elec. Co. v. Joiner, 522 U.S. 136, 138, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997). We find no abuse.

Rule 702 of the Federal Rules of Evidence sets standards for an expert witness's qualification and the substance of the expert's testimony. As relevant here, the witness must be "qualified as an expert by knowledge, skill, experience, training, or education." The testimony must be "based on sufficient facts or data" and be "the product of reliable principles and *1303 methods" that the expert "reliably applie[s] ... to the facts of the case." The latter requirements are rooted in Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 592–93, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993) (requiring that "the expert's opinion will have a reliable basis in the knowledge and experience of his discipline ... properly ... applied to the facts in issue").

.....

20The district court acted well within its discretion in rejecting Marvell's attacks on Ms. Lawton's qualifications and general methodology…. The court also examined the basis for Ms. Lawton's testimony by reviewing her lengthy expert report, two updated expert reports, and a supplemental report and by holding an extended Daubert hearing at which CMU's counsel "essentially conducted his direct examination of [Ms.] Lawton." Id. at *1. For areas outside her expertise, such as details unique to the semiconductor industry, the district court properly concluded that Ms. Lawton could, indeed must, rely upon CMU's other experts having such

industry-specific experience. Id. at *14; see Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1321 (Fed.Cir.2014) ("Experts routinely rely upon other experts hired by the party they represent for expertise outside their field."), partly overruled in respect not relevant here by Williamson v. Citrix Online, LLC, No. 2013–1130, 792 F.3d 1339, 1348, 2015 WL 3687459, at *6 (Fed.Cir. June 16, 2015) (en banc in part). And, as noted more fully below, Ms. Lawton in fact took reasoned account of the evidence that Marvell says that she "disregarded." Marvell Opening Br. 47. In these circumstances, the district court did not err, as to either qualifications or substantive methodology, in admitting Ms. Lawton's testimony.

[*The court here cites the correct test, though, not unusually, then doesn't directly apply the language of the rule. It would have been preferable for the court to explain why the methodology was reliably applied to the facts of the case, especially given that the court suggested that the district court (incorrectly) only looked to the expert's "general methodology.*]

820 F.3d 1316

United States Court of Appeals, Federal Circuit.

SPORT DIMENSION, INC., A California Corporation, Plaintiff–Appellee

v.

The COLEMAN COMPANY, INC., A Delaware Corporation, Defendant–Appellant.

No. 2015–1553

April 19, 2016.

B.

Coleman also challenges the district court's exclusion of its expert, Peter Bressler. We review a district court's exclusion of expert testimony under the law of the regional circuit, here the Ninth Circuit. *Proveris Sci. Corp. v. Innovasystems, Inc.,* 536 F.3d 1256, 1267 (Fed.Cir.2008). The Ninth Circuit reviews a district court's exclusion of an expert for an abuse of discretion. *Cabrera v. Cordis Corp.,* 134 F.3d 1418, 1420 (9th Cir.1998).

10 **District court judges perform a gatekeeping role for expert testimony. They must ensure that expert testimony is reliable and that the testimony "relate[s] to scientific, technical or other specialized knowledge, which does not include unsubstantiated speculation and subjective beliefs."** *Diviero v. Uniroyal Goodrich Tire Co.,* 114 F.3d 851, 853 (9th Cir.1997) (citing *Daubert v. Merrell Dow Pharm., Inc.,* 509 U.S. 579, 590, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993)); *see also* **Fed.R.Evid. 702.**

11 The district court here excluded Mr. Bressler, an industrial design consultant with four decades of industry experience, because he had "no experience whatsoever in the field of [personal flotation devices]." J.A. 27. The record supports the district court's conclusion. Mr. Bressler, when asked to evaluate Sport Dimension's expert's testimony on one aspect of the device's function, stated: "I'm not an expert on personal flotation devices." Appellee's Br. 45. His proposal for alternative armband designs, by Mr. Bressler's admission, was based on his "imagination." *Id.* at 45–46. And he further admitted that he had no work experience with wearable buoyancy devices before serving as an expert. *Id.* at 45–47. In light of Mr. Bressler's admitted inexperience and unfamiliarity with the very subject on which Coleman sought to rely on his testimony, the district court did not abuse its discretion in excluding his testimony. *See Cabrera,* 134 F.3d at 1420.

[*Rule 702 is the rule courts are supposed to apply, not a "see also" for Daubert.*]

25 F.4th 960

United States Court of Appeals, Federal Circuit.

APPLE INC., Plaintiff-Appellant

v.

WI-LAN INC., Defendant-Cross-Appellant

III

Apple next challenges Mr. Kennedy's damages methodology in the second trial. We agree that his methodology was flawed, and thus, the district court abused its discretion by denying Apple's motion for a new trial.

1314 In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589–95, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), the Supreme Court set forth the standards governing admissibility of expert testimony under Federal Rules of Evidence 702 and 703. The Court explained that the trial judge plays a "gatekeeping role," *id.* at 597, 113 S.Ct. 2786, which "entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue," *id.* at 592–93, 113 S.Ct. 2786. The Court emphasized that the focus "must be solely on principles and methodology, not on the conclusions that they generate." *Id.* at 595, 113 S.Ct. 2786. "[A] reasonable or scientifically valid methodology is nonetheless unreliable where the data used is not sufficiently tied to the facts of the case." *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015). Likewise, "ideal input data cannot save a methodology that is plagued by logical deficiencies or is otherwise unreasonable." *Id.* But where the methodology is reasonable and its data or evidence are sufficiently tied to the facts of the case, the gatekeeping role of the court is satisfied. *Id.*

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Mr. Kennedy's methodological and factual errors in analyzing the comparable license agreements render his opinion untethered to the facts of this case. Thus, Mr. Kennedy's damages testimony should have been excluded. We conclude the district court abused its discretion in denying Apple's motion for a new trial on damages.

[*I don't have any objection to the court's application of the rule here, but the rules for admissibility is incorrect on several fronts. First, Daubert is not the governing rule; Rule 702, enacted over 7 years later, is. Second, amended Rule 702 clarifies that, elaborates on the point that methodology and conclusions are not entirely distinct, that the methodology must be reliably applied to the facts of the case to generate an admissible conclusion. And finally, the court cites the language from Summit 6 regarding data not sufficiently tied to the facts of the case, rather than Rule 702's admonition that the methodology must be "reliably applied to the facts of the case. More generally, amended Rule 702 and its language are just AWOL here*.]