

1 UNITED STATES DISTRICT COURT
2 DISTRICT OF PUERTO RICO

3 MONSERRATE NORIEGA-SANCHEZ,

4 Plaintiff,

5 v.

Civil No. 05-1967 (RLA/JAF)

6 FORD MOTOR COMPANY;
7 BRIDGESTONE/FIRESTONE NORTH
8 AMERICAN TIRE, LLC.;
9 BRIDGESTONE/FIRESTONE, INC.,
10 X, Y, and Z INSURANCE COMPANIES;
11 CLARK DOE, MARK DOE, JOE DOE,
12 ROBERT DOE, AND JOHN DOE,

13 Defendants.

14 **OPINION AND ORDER**

15 This is a near four-year-old civil litigation case that is
16 being addressed as part of our obligation to dispose of three-year-
17 old-and-older cases under the Directives of the Judicial Conference
18 of the United States. See Misc. 09-59 (JAF) (Docket No. 168).

19 **I.**

20 **Introduction**

21 This case is a products-liability action brought by Plaintiff
22 Monserrate Noriega-Sánchez ("plaintiff") against Ford Motor Company
23 ("FMC"), Bridgestone/Firestone North American Tire LLC.
24 ("Firestone"), Bridgestone/Firestone, Inc., and other unknown
25 persons and corporations. Plaintiff alleges that the Firestone tire
26 on her vehicle failed and during the ensuing accident, the air bag

1 in her vehicle did not function properly, causing the injuries for
2 which she seeks damages. Plaintiff's causes of action against
3 defendants are brought under strict liability and negligence
4 theories, alleging defects in the design, manufacture, or
5 construction of the tire and air bag.

6 Firestone moves to exclude from trial the opinion testimony of
7 plaintiff's expert, Jeffrey Ketchman ("Ketchman"), hereinafter
8 referred to as "Firestone's motion."¹ (See Docket No. 111.)
9 Firestone further moves for summary judgment pursuant to FED. R.
10 CIV. P. 56(c) on grounds that upon the exclusion of Ketchman's
11 testimony, plaintiff will be unable to establish the prima-facie
12 elements of her causes of action. Ford joins Firestone's motion.
13 (Docket No. 112 n.3.) Plaintiff opposes Firestone's motion. (See
14 Docket Nos. 121 and 125.) After careful review and consideration of
15 the arguments and pertinent law, we grant in part Firestone's
16 motion to exclude and defer judgment on Firestone's motion for
17 summary judgment.

18 II.

19 Factual and Procedural Background

20 The following relevant facts are deemed uncontested by the
21 court because they were included in Firestone's motion or

¹ FMC moves on different grounds to exclude the opinion testimony of Ketchman and for summary disposition. (See Docket No. 112.) FMC's motion for summary disposition will be disposed of separately.

1 plaintiff's opposition, properly supported by evidence, and either
2 admitted or not genuinely opposed. On September 12, 2004, plaintiff
3 was driving her 1995 Ford Explorer (the "Explorer") northbound on
4 Highway 52 in the municipality of Juana Díaz, Puerto Rico, when the
5 original equipment Firestone FR 480 passenger tire (the "tire"),
6 mounted on the rear left side of the vehicle, allegedly failed,
7 after which plaintiff lost control of her Explorer. Plaintiff's
8 wrist was broken in the ensuing accident. Plaintiff alleges that
9 the injury to her wrist and other, less-defined injuries, are
10 affecting her ability to carry out her duties as a neurologist.

11 On September 12, 2005, plaintiff filed a complaint against FMC
12 and Firestone, among others, alleging that the tire "blew out" due
13 to a "defect of design or construction, due to tread separation and
14 other defects" (Docket No. 1, ¶ 9), and that the air bag "did not
15 promptly open or work" (Docket No. 1, ¶ 10). Plaintiff's claims are
16 brought under strict liability and negligence theories. (See Docket
17 No. 1, ¶¶ 26-31.) Plaintiff designated Ketchman as her sole
18 liability expert to discuss alleged defects in the design or
19 construction of the tire and the causal connection of such defects
20 to the accident (see Docket Nos. 24 at 29 and 32 at 2).² Ketchman

² It does not appear that plaintiff offers the opinion testimony of Mr. Ketchman for the purpose of establishing defects in the design, manufacture or construction of the air bag and the issue is not addressed in Firestone's motion. As such, we do not evaluate Ketchman's qualifications to testify as an expert in that regard.

1 acquired experience working with tires and tire technology through
2 his work as a mechanical engineer³ for the Tire Equipment Division
3 of AMF, Inc. ("AMF") between 1976 and 1985, as well as his work for
4 InterCity Testing and Consulting Corporation⁴ ("InterCity") between
5 1987 and present.

6 In his July 2007 deposition, Ketchman opined that the tire had
7 two design defects: (i) a belt wedge gauge⁵ designed too thin for
8 the tire; and (ii) a belt wedge compound that is not as resistant to
9 tread belt separation as other available compounds. (See Docket
10 No. 111-3 at 90-91.) In his supplemental expert report, dated
11 January 20, 2007, Ketchman opines that the above two design defects
12 caused a tread separation in the tire:

13 [T]he subject tire was defectively designed
14 and possibly defectively manufactured. It is
15 known that belt-to-belt separation, such as
16 occurred here, can be caused by the spread of

³ Ketchman earned a master's degree in mechanical engineering from Ohio State University in 1967 and a doctorate of engineering science from Columbia University in 1972. (See Docket No. 111-6.)

⁴ Inter-City provides Forensic Engineering, Consulting and Expert Testimony to law offices, insurance companies and government agencies. See <http://www.intercitytesting.com> (visited July 31, 2009). Inter-City has offices in New York, California, and Florida. (See Docket No. 111-2 at 36.) In 2005, Ketchman acquired a one-third ownership interest in Inter-City - New York. According to Ketchman, approximately eighty-five to ninety-five percent of Inter-City's work is litigation related, with the remaining work being product development or product-testing related. (See Docket No. 111-2 at 79.)

⁵ The "belt wedge" is "a strip of rubber located near the edges of the steel belts that serves to cushion the stresses caused by the operation of a steel belted radial tire." (Docket No. 111 n.3.) The "gauge" is the "thickness of the belt wedge, as opposed to its length or width." (Docket No. 111 n.4.)

1 cracks that initiate at the outer edge
2 circumferences of the belts, under the action
3 of tire flexing during operation . . . To
4 help resist crack formation at the belt
5 edges, manufacturers have employed belt edge
6 inserts (BEI) and additionally "belt wedges",
7 which are thin tapered circumferential strips
8 of rubber inserted between the first and
9 second belts . . . The submitted
10 specifications indicate that the FR480 has
11 belt edge inserts (BEI) and belt wedges. The
12 BEI compound was changed, between the 1998
13 and 1994 Specifications, from DMS17 to V1697
14 . . . The belt wedge thickness of .020 inches
15 did not change, nor has the rubber compound,
16 J2917. It is to be noted, . . . that one of
17 the changes that was made to help solve the
18 belt separation problems of the Firestone
19 Wilderness AT and ATX tires was to increase
20 the inner belt gauge/thickness from .021 to
21 .025 inches or close to 20 percent. Also the
22 wedge material was changed to be the same as
23 that of the skim coating rubber used on the
24 Stabilizer plies of the FR 480, compound
25 J257. The stabilizer plies lie under both
26 steel belts and also have to resist heat and
27 strain in a similar manner. Even though the
28 Wilderness tires and the FR480 are different
29 tires, the basic design of the tires is
30 substantially alike (radial plies/ belt edge
31 inserts/ belt wedges/materials, etc) such
32 that the design practices developed for
33 preventing belt-to-belt separation is common
34 across sizes and models. Thus it appears
35 that the FR480 design was defective because
36 the belt wedge was too thin and the material
37 was not selected for adequate crack-formation
38 resistance, even though it was available and
39 used elsewhere in the tire.

40
41 (Docket No. 121-5). In his expert reports, dated June 13, 2006, and
42 January 20, 2007, Ketchman refers to the possibility of a
43 manufacturing defect in the tire (see Docket Nos. 121-4 at 9 and

1 121-5 at 1), but later concedes in deposition that he found no
2 defects in the manufacture of the tire and offers no opinions to
3 that effect (see Docket No. 111-3 at 97).

4 III.

5 Firestone's Motion to Exclude the Opinion Testimony 6 of Jeffrey Ketchman

7 Firestone contends that the proposed opinion testimony of
8 Ketchman is "unqualified and scientifically unsupported" and,
9 therefore, must be excluded pursuant to the mandates of *Daubert v.*
10 *Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993) and *Kumho Tire v.*
11 *Carmichael*, 526 U.S. 137 (1999). (Docket No. 111 at 1.) Firestone
12 specifically contends that Mr. Ketchman (1) is not qualified to
13 offer expert opinions in on matters of tire design and (2) offers
14 testimony that does not meet the requisite reliability and
15 admissibility standards for expert testimony. We do not reach
16 Firestone's second argument because we do not find Ketchman
17 sufficiently qualified to offer certain opinion testimony in this
18 case.

19 **1. Ketchman's Qualifications Pursuant to Rule 702 Standard**

20 Relying primarily on Ketchman's deposition testimony⁶ and
21 expert reports, Firestone contends that Ketchman has "no

⁶ Firestone relies on Ketchman's July 2007 deposition testimony in this case and Ketchman's June 2006 deposition testimony in *Easterling v. Bridgestone/Firestone North American Tire, LLC, et al.*, which venued in the Eighth Judicial Circuit, Alachua County, State of Florida. (Docket No. 111-2.)

1 qualifications to render the tire design and tire failure analysis
2 opinions he seeks to offer here." (Docket No. 111 at 2.) We agree,
3 in part.

4 A district court must determine if a witness offering expert
5 opinion testimony is qualified "by knowledge, skill, experience,
6 training, or education." United States v. Vargas, 471 F.3d 255, 262
7 (1st Cir. 2006) (citing Fed. R. Evid. 702); Santos v. Posadas De
8 Puerto Rico Associates, Inc., 452 F.3d 59 (1st Cir. 2006) (citing
9 Fed. R. Evid. 702); Prado v. Alvarez v. R.J. Reynolds Tobacco Co.,
10 405 F.3d 36, 40 (1st Cir. 2005) (citing Fed. R. Evid. 702). Trial
11 judges have considerable discretion to decide the qualifications of
12 an opinion witness. "The test is whether, under a totality of the
13 circumstances, the witness can be said to be qualified as expert in
14 a particular field, through any one or more of the five bases
15 enumerated in Rule 702-knowledge, skill, experience, training, or
16 education." Santos v. Posadas De Puerto Rico Associates, Inc., 452
17 F.3d 59, 63-64 (1st Cir. 2006).

18 Plaintiff offers Ketchman as an expert on tire design and tire
19 failure analysis, among other expertise.⁷ In consideration of the
20 defects alleged by Ketchman, we look for Ketchman's qualifications

⁷ Plaintiff also offers Ketchman as an expert in automotive accident reconstruction or "accident sequence." (Docket No. 121-4 at 9.) Firestone's motion does not challenge Ketchman's qualifications to offer testimony as an expert on automotive accident reconstruction and, therefore, we do not address Ketchman's qualifications in that regard.

1 to testify as an expert on belt wedge design and its connection to
2 belt-to-belt tread separation in a Firestone FR480 steel-belted
3 radial passenger tire. After a thorough review of the pleadings, we
4 conclude that Ketchman is qualified to testify as an expert on tire
5 failure analysis in this case, but only with respect to whether or
6 not a tread separation occurred in the tire. We do not find
7 Ketchman qualified to testify as an expert on tire design or more
8 specifically, belt wedge design and its causal connection, if any,
9 to tread separation in the tire.

10 As a preliminary matter, we address Firestone's effort to
11 characterize Ketchman as a "generalist expert-type witness."
12 (Docket No. 111.) Indeed, Ketchman would appear to have been
13 retained for his expertise on a variety of products in conjunction
14 with his work for InterCity.⁸ While interesting, Ketchman's work in
15 other cases dealing with other products is not dispositive on the

⁸ Firestone notes Ketchman's experience providing technical consultation and testimony on wheelchairs, lawnmowers, glass bottles, lanterns, wood chippers, pallet jacks, motorcycles, saws, oil drilling rigs, bakery machinery, elevators, washing machines, ladders, pulse monitors, bread making equipment, escalators, airline storage bins, shears, road wideners, needle containers, tanker trucks, garbage trucks, grinders, bus doors, ski bindings, meat slicers, hunting bows, hard hats, newspaper dispenser box, front end loaders, seat belts, tractors, hydraulic tools, food racks, salt spreaders, paint ball guns, forklifts, windows, trampolines, snow plows, printing presses, filament winding machines, amusement and recreation park rides, apparel stitching equipment, generators, relays, time remoters, fire and explosion products, glass and ceramic products, lighting fixtures, dimmers, electronic converters, coatings, directional drilling, pipelines pegs, woodworking, metal, sonar, exercise bicycles, racquets, tobacco and cigarette making equipment, boats, mopeds, golf carts, etc. (See Docket No. 111-2 at 65-75.)

1 issue of whether Ketchman is qualified to testify as an expert on
2 the technical matters at issue in this case. Accordingly, our
3 opinion is not influenced by such information.

4 More on point, Firestone argues that Ketchman is not
5 qualified to testify as an expert on tire design and tire failure
6 analysis in this case because he (1) has no formal training and no
7 educational course work in passenger tire failure analysis (see
8 Docket No. 111-3 at 149); (2) has no training in rubber or polymer
9 chemistry (see *id.* at 138); (3) has never prepared the rubber
10 specifications for any rubber compound or held a position as a
11 rubber compounder (see Docket No. 111-3 at 138); (4) has never
12 designed a passenger tire or prepared the design specifications for
13 any passenger tire (see *id.* at 136); (5) has never designed a belt
14 wedge tire component (see Docket No. 111-3 at 137); (6) has never
15 designed any component for a new, passenger tire (see *id.* at 137);
16 (7) has never been retained by any tire company to consult in the
17 formulation of a rubber compound to be used in a belt wedge (see
18 Docket No. 111-3 at 423); (8) has never designed methods of
19 operation for any tire plant (see *id.* at 134); (9) has been in a
20 tire plant on only one or two occasions as an observer, over twenty
21 years ago (see Docket No. 111-3 at 135-36); (10) has never worked
22 for a tire company that designs or manufactures tires (see *id.* at
23 142); (10) has never been asked to testify by any tire designer

1 about tire failure analysis, tire design, or rubber formulation for
2 use in a tire, including its belt wedge (see Docket No. 111-3 at
3 423-24); (11) has never performed any testing on any tire product,
4 including testing regarding high speed, under-inflation,
5 overloading, internal temperatures, stresses, dynamic or drum
6 testing, rubber cohesion, tire aging, or chemical composition in
7 tires⁹ (see Docket Nos. 111-2 at 117-20 and 111-3 at 159-81);
8 (12) has never prepared, produced or published any paper, treatise
9 or other literature in the field of tire design or manufacture (see
10 Docket No. 111-3 at 134-35); (13) has never been qualified in any
11 federal court to render opinions as a tire design expert (see *id.*
12 at 145-46); (14) has examined fewer than twenty tires with tread
13 belt separation during the time he worked for the AMF Tire
14 Equipment Division and InterCity (see Docket No. 111-3 at 154); and
15 (15) has never been a member of any organization that focuses its
16 activities on tires or tire technology (see *id.* at 140-41).

17 Ketchman's deposition testimony does not comport with two of
18 Firestone's stated facts. First, Ketchman does not concede that he
19 has never been affiliated with any organization that focuses on
20 tires and tire technology. Ketchman stated in deposition that he

⁹ Although not noted in Firestone's Motion, Ketchman also concedes in deposition that he has never performed tests designed to produce tread belt separation (see Docket No. 111-2 at 120) or to compare the performance of tires with different wedge gauges or wedge compounds (see Docket No. 111-3 at 164).

1 was a member of the Tire and Rim Association through his
2 association at AMF.¹⁰ (See Docket No. 111-3 at 140.) Second,
3 Ketchman does not concede that he has never been qualified by a
4 court to offer an opinion on tire manufacture or design. As noted
5 in plaintiff's opposition, Ketchman stated in deposition that a
6 court in New Jersey qualified him to offer such an opinion;
7 however, that opinion, provided more than ten years ago, did not
8 concern a tire belt wedge. (See Docket No. 111-3 at 146-47.)

9 In response to Firestone's contention that Ketchman has no
10 experience in the design of rubber compounds, plaintiff references
11 Ketchman's "experience [at AMF] in the use of rubber and composite
12 constructions in the design of products such as tires, industrial
13 hoses, couplings, vibration isolators and sports equipment."
14 (Docket No. 121-6.) Plaintiff's response is not compelling for two
15 reasons. First, plaintiff fails to state whether such

¹⁰ In Ketchman's statement, submitted in support of plaintiff's opposition, Ketchman lists the organizations in which he currently holds membership to include: Accreditation Commission for Traffic Accident Reconstruction (ACTAR) (peer review Committee), American Society of Mechanical Engineers, American Society of Safety Engineers, System Safety Society, American Society of Testing and Materials, Society of Automotive Engineers, American College of Forensic Examiners, Institute of Diagnostic Engineers (UK), New York Academy of Sciences, American Association for Advancement of Science, Association of Research Directors, National Association of Professional Accident and Reconstruction Specialists. (Docket No. 121 at 9.) Plaintiff does not offer information as to which, if any, of the above-listed organizations, or subgroups thereof, are focused on tires or tire technology and the extent of Ketchman's participation in such organizations or subgroups.

1 "constructions" included belt wedges. Second, the "use of" rubber
2 and composite constructions is not equivalent to their "design."

3 In opposition to Firestone's motion, Plaintiff takes the
4 position that Ketchman is qualified by his "on-the-job training"
5 and "research and development of techniques for tire failure
6 analysis"¹¹ while at AMF between 1976 and 1985, as well as his work
7 in "tire failure analysis" for InterCity between 1987 and present
8 (See Docket Nos. 121 at 6 and 121-3 at 02-03). We, therefore, focus
9 on Ketchman's relevant work experience at AMF and Inter-City.

10 At AMF, Ketchman consulted on various types of AMF
11 products,¹² including a tire retreading process (see Docket No 111-
12 2 at 52, 62). In his June 2006 deposition, Ketchman represented
13 that he carried out one-hundred percent of his tire-related work at
14 AMF for the tire equipment division and that such work "was related
15 to, in various ways to the retreading processing, either for the
16 design or development of equipment for that or for analytical
17 techniques to assist in the tire retreading process." (Docket
18 No. 111-2 at 63.) Ketchman describes the project he worked on at
19 AMF as "a project devoted to helping the tire division find,

¹¹ Such techniques included "x-ray techniques, ultrasound techniques, acoustic emission techniques." (See Docket No. 111-3 at 149.)

¹² Such products included without limitation bakery machinery, bakery equipment, apparel equipment, tire, rubber processing equipment, filter housings, lawnmowers, motorcycles, golf carts, bicycles, sporting equipment, electro-mechanical relays. (See Docket No. 111-2 at 60.)

1 hopefully find a quick sure method of assessing whether a used tire
2 was suitable for retreading" (Docket No. 111-2 at 62). Notably, the
3 retreading process at AMF with which Ketchman worked primarily
4 involved truck tires. (Docket Nos. 111-2 at 64 and 111-3 at 137.)
5 Ketchman's responsibilities at AMF included the development of tire
6 buffing blades and analysis of the buffing process, tire carcass
7 and tire body. (See Docket Nos. 121-6 and 111-2 at 62.) In his July
8 2007 deposition, Ketchman described his duties at AMF with more
9 ambiguity, as including responsibility for "research in tire-defect
10 analysis" and "research in methods of determining defects in tires
11 as a corporate project." (Docket No. 111-3 at 150.) Ketchman's
12 tire-related work for the AMF tire equipment division constitutes
13 roughly ten to fifteen percent of his nine years with AMF (see
14 Docket No. 111-2 at 61-62) and ultimately led to a patented,
15 commercialized process for retreading used tire carcasses (see
16 Docket Nos. 121-3 at 02 and 111-3 at 136-37). During his time with
17 AMF, Ketchman examined fewer than ten tires with tread belt
18 separation. (Docket No. 111-3 at 153-54.)

19 Since 1987, Ketchman has been "involved in tire failure
20 analysis" for InterCity, most of which is litigation related.
21 (Docket No. 121 at 2.) At Intercity, Ketchman "investigated,
22 directly and as a side-investigator . . . some tire tread
23 separations that have lead to accidents." (Docket No. 111-3 at

1 405.) During his time with InterCity, Ketchman evaluated fewer than
2 ten tires with tread separation (see Docket Nos. 111-3 at 148 and
3 152) and served as an expert on tread-belt separation on "maybe
4 half a dozen" occasions (see Docket No. 111-3 at 407).

5 Ketchman spoke to his own qualifications in deposition.
6 When asked whether he has any formal training in tire failure
7 analysis, Ketchman responded "I do not have formal training in the
8 sense of a course. My training comes from experience from working
9 with people at AMF who were involved in the industry, from
10 attending presentations as we have discussed, and from reading and
11 from participating in tire failure analyses while I have been here
12 at Intercity." (Docket 111-2 at 96). When asked why he is qualified
13 to testify as an expert on tread-belt separation in this case,
14 Ketchman responded that he is qualified because he has experience
15 in "examining" and "reading them", he knows "tire construction",
16 and he has "worked on putting tread on retreaded tires" as part of
17 his work at AMF. (Docket No. 111-3 at 408.) When asked what
18 knowledge he had of belt wedge design, Ketchman responded "well,
19 the knowledge comes from the nature of tire design and tire
20 deflection; the action of laminated layers, like steel belts,
21 acting next to each other in bending, generating shearing forces;
22 and the - effect that a -- that a wedge or putting material between
23 those layers can have; and from specific reading such as the

1 studies that have been done on . . . the Wilderness studies and the
2 NHTSA studies." (Docket No. 111-3 at 406.)

3 Noticeably absent from plaintiff's opposition and Ketchman's
4 own deposition testimony is any indication that Ketchman's work for
5 AMF or InterCity involved belt wedge design or, more importantly,
6 belt wedge design as a factor in causing or preventing tread
7 separation. We glean from the record that Ketchman's limited
8 knowledge of belt wedge design and its possible effect on tread
9 separation in other tire models, such as the Firestone Wilderness
10 AT tire, has been acquired through the study of one or two studies
11 conducted by others, including those conducted by the defendants.
12 (See Docket No. 121-3 at 4 ("[K]nowledge of the defect in the
13 subject tire manufacture became known from materials produced by
14 the Defendant during discovery in this case and from the
15 Defendant's investigation of failures of other steel belted radial
16 tires, such as the Wilderness tires.")) (See, e.g., Docket No. 111-3
17 at 73-87 (discussing the NHTSA¹ report)). Under these
18 circumstances, we do not find Ketchman qualified by his knowledge,
19 skill, experience, training, and education to offer opinion
20 testimony on tire design or more specifically, belt wedge design
21 and its causal connection to tread separation in the FR 480 steel
22 belted radial passenger tire. In light of Ketchman's work

¹ NHTSA is the acronym for the National Highway Transportation Safety Administration.

1 evaluating tread separation at AMF and InterCity, we do find him
2 qualified to offer opinion testimony as an expert on the issue of
3 whether a tread separation occurred in the tire.

4 **IV.**

5 **Conclusion**

6 For the reasons stated above, Firestone's Motion to exclude
7 the opinion testimony of Plaintiff's expert Ketchman is **GRANTED IN**
8 **PART AND DENIED IN PART.** A decision on Firestone's motion for
9 summary judgment is deferred until such time as the court has had
10 an opportunity to confer with the parties at a **Settlement**
11 **Conference to be held on September 24, 2009, at 1:30 P.M.** Counsel
12 must appear authorized to settle the case.

13 **IT IS SO ORDERED.**

14 San Juan, Puerto Rico, this 2nd day of September, 2009.

15 S/José Antonio Fusté
16 JOSE ANTONIO FUSTE
17 Chief U. S. District Judge