UNITED STATES DISTRICT COURT WESTERN DISTRICT OF KENTUCKY BOWLING GREEN DIVISION

CIVIL ACTION NO. 1:07-CV-00068

MATT HOPKINS PLAINTIFF

v.

FORD MOTOR COMPANY

DEFENDANT

MEMORANDUM OPINION AND ORDER

This matter is before the Court on Defendant Ford Motor Company's motion to exclude the testimony of Plaintiff's expert Keith Armstrong [DN 59]. A Daubert hearing was held on November 1, 2011 and Mr. Armstrong was examined. The matter is now ripe for decision. For the reasons set forth below, the Defendant's motion is **GRANTED.**

I. BACKGROUND

This controversy arises out of an injury that resulted when a Ford motor vehicle crashed due to unintended acceleration. Plaintiff Matt Hopkins, a car wash attendant, was employed by Tender Touch Car Wash to move vehicles to a drying/detailing area once the cars had completed an automatic wash cycle. On April 13, 2006, Plaintiff attempted to move a 2002 Ford Mercury Grand Marquis after the vehicle had passed through the car wash. Plaintiff entered the vehicle and, with his left leg outside the vehicle, he shifted the vehicle into gear. The vehicle suddenly accelerated into a ditch. The knee of his exposed leg was injured in the accident. The parties dispute what caused the Grand Marquis to unexpectedly accelerate. Plaintiff alleges the vehicle accelerated because electromagnetic interference ("EMI") caused the cruise control system to engage. Defendant argues that Plaintiff accidentally hit the accelerator and no defect existed with the

vehicle's cruise control system.

II. STANDARD OF REVIEW

The Defendant argues that the testimony of Plaintiff's expert, Keith Armstrong, must be excluded under <u>Daubert v. Merrell Dow Pharm.</u>, <u>Inc.</u>, 509 U.S. 579 (1993) and its progeny.

Fed. R. Evid. 702. Rule 702 provides:

If 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.

Under Rule 702, the trial judge acts as a gatekeeper to ensure that expert testimony is both reliable and relevant. Mike's Train House, Inc. v. Lionel, L.L.C., 472 F.3d 398, 407 (6th Cir. 2006) (citing Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999)). In determining whether certain testimony is reliable, the "inquiry envisioned by Rule 702 is . . . a flexible one. Its overarching subject is the scientific validity and thus the evidentiary relevance and reliability of the principles that underlie a proposed submission. The focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." Daubert, 509 U.S. at 594-95. In Daubert, the Supreme Court identified a non-exhaustive list of factors that may assist the Court in assessing the reliability of a proposed expert's opinion including: (1) whether a theory or technique can be or has been tested; (2) whether the theory has been subjected to peer review and publication; (3) whether the technique has a known or potential rate of error; and (4) whether the theory or technique enjoys "general acceptance" within a "relevant scientific community." Id. at 592-94. This gatekeeping role is not limited only to expert testimony based upon scientific knowledge, but extends to "all 'scientific,'

'technical,' or 'other specialized' matters within" the scope of Rule 702. <u>Kumho Tire</u>, 526 U.S. at 147-48.

Whether the Court applies the <u>Daubert</u> factors to assess the reliability of the testimony of an expert witness "depend[s] on the nature of the issue, the expert's particular expertise, and the subject of his testimony." <u>Id.</u> at 150 (quotation omitted). Again, <u>Daubert</u> is a flexible test and no single factor, even testing, is dispositive. <u>See Kumho Tire</u>, 526 U.S. at 151-52; <u>Smith v. Ford Motor Co.</u>, 215 F.3d 713, 719 (7th Cir. 2000). However, "[n]othing in either <u>Daubert</u> or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and opinion proffered." <u>General Elec. Co. v. Joiner</u>, 522 U.S. 136, 146 (1997). In addition to the <u>Daubert factors</u>, trial courts also may "take judicial notice of methods and techniques which already have been recognized by existing case law as reaching the status of scientific reliability." <u>Goodyear Tire and Rubber Co. v. Thompson</u>, 11 S.W.3d 575, 579 (Ky. 2000) (citing Johnson v. Commonwealth, 12 S.W.3d 258, 262 (Ky. 1999)).

III. DISCUSSION

Plaintiff has listed Keith Armstrong as an automobile electronics expert to testify that the Grand Marquis cruise control system was defective because it was susceptible to electronic magnetic interference ("EMI"). Mr. Armstrong, an electrical engineer, intends to testify to the following: "that the design of Ford's Next Generation cruise control system is defective in that [it] is capable of opening the throttle to a near wide open condition without a signal from the driver due to the impact of EMI; that the system is not failsafe; that Ford ignored its own guidelines for electromagnetic compatibility (EMC) and other available alternative measures that would have

improved the system's EMC; and that Ford's EMC testing protocols and testing results are insufficient bases to ensure the functional safety of the cruise control system." (Pl.'s Resp. to Def's Mot. to Exclude Test. of Keith Armstrong 7-8 [DN 71].) Ford does not challenge Mr. Armstrong's qualifications regarding EMI in general, it challenges the specific opinion that EMI can cause the Ford Next Generation cruise control system to malfunction and produce unintended acceleration in a Ford vehicle. (Def.'s Reply in Supp. of its Mot. to Exclude the Test. of Keith Armstrong 2 [DN 76].)

The Court concludes that Armstrong's testimony fails to meet the standards set forth in <u>Daubert</u> and Rule 702. While the Court accepts the fact that Armstrong has experience with electronics generally and that the effects of EMI on electrical systems are well known in the scientific community, his theory that EMI is capable of causing a cruise control system to suddenly accelerate a vehicle from a dead stop has not been proven or accepted as reliable in the relevant scientific community.

Mr. Armstrong's degree is in electrical engineering and for the last several years he has worked as a consultant providing electronic design services. (Armstrong Dep. 29:23, 39:4-40:8.) His work in the automotive industry is limited to two consulting experiences (one with a component supplier on a speed control system that governed the speed and the other as a consultant for a subcomponent supplier on a gas saving engine) and co-teaching a week long training course in Australia regarding EMC standards and testing requirements for auto designers. (Id. at 34:2-35:6, 36:18-37:9, 57:12-21.) Mr. Armstrong has never been employed by any automobile manufacturer or automotive component part supplier. (Id. at 31:11-25.) He also has never designed or tested an automotive cruise control system. (Id. at 33:17-20.) Mr. Armstrong first began his work with cruise

control systems in late 2007 when hired by Plaintiff's attorney. (Id. at 10:21-11:16.)

Mr. Armstrong has not conducted any testing in order to validate his theory that EMI could cause a Mercury Grand Marquis, or any vehicle for that matter, to suddenly accelerate. Not only has he failed to test his theory successfully, he acknowledged that it was most likely impossible to do. Armstrong has not been able to replicate EMI's effect on a vehicle's cruise control system, nor does he know of any experiment where any expert has ever caused any vehicle to suddenly accelerate because of EMI. He admits that "it is usually the case that it is very difficult to determine if a malfunction was caused by [EMI] or some other cause." (Pl.'s Resp. to Def.'s Mot. to Exclude Testimony of Keith Armstrong Ex.1, 7.) While the Court understands that thousands of factors may contribute to EMI interference, Mr. Armstrong has not conducted any EMC tests of any kind to verify that any cruise control system is capable of opening the throttle to a near wide open condition without a signal from the driver due to the impact of EMI. (Armstrong Dep. 69:3-6.)

Armstrong's theory that EMI can cause sudden vehicle acceleration has not been generally accepted by the scientific community. The United States Department of Transportation's National Highway Traffic Safety Administration examined the very issue presented in this case and published their findings in 1989. The Administration specifically rejected Armstrong's EMI theory and has not since acknowledged the theory or otherwise changed their opinion. (See Def.'s Mot. to Exclude Testimony of Keith Armstrong, Ex. J ("For [Sudden Acceleration Incidents] in which there is no evidence of throttle sticking or cruise control-malfunction, the inescapable conclusion is that these definitely involve the driver inadvertently pressing the accelerator instead of, or in addition to, the brake pedal.")).

Likewise, Armstrong's theory has not met with acceptance by courts who have examined it.

Several courts have recently excluded similar expert testimony on EMI and unintended acceleration based on reliability concerns. See Watson v. Ford Motor Co., 699 S.E.2d 169, 178 (S.C. 2010) ("In our view, there is no evidence indicating that Dr. Anderson's testimony contained any indicia of reliability. He had never published articles on his theory nor had he tested his theory. Importantly, Dr. Anderson admitted that it was not possible to test for EMI. Furthermore, although it is not a prerequisite in South Carolina that scientific evidence attain general acceptance in the scientific community before it is admitted, we find it instructive that not only has the underlying science not been generally accepted, Dr. Anderson's theory was rejected in the scientific community."); <u>Turker</u> v. Ford Motor Co., 2007 WL 701046, at *5 (Ohio Ct. App. 2007) ("The record supports the trial court's determination that [plaintiff] failed to establish that [the expert's] theory-that electromagnetic interference could have affected the cruise control and caused the vehicle to suddenly accelerate-was based on a reliable scientific foundation. Although [the expert's] theory may have been based on valid scientific principles and methods, there was a lack of evidence showing a reliable connection between this data and the opinion proffered. Simply put, the principles and methodology utilized by [the expert] did not establish the legal reliability of his opinion. The journey to his conclusion was flawed. There was a lack of evidence that [the expert's] theory had been published, subjected to peer review, or generally accepted by the scientific community. He testified that he had not tested his theory successfully. Other studies have rejected [the expert's] conclusions. There was simply a lack of evidence showing a causal connection between an electromagnetic interference and a cruise control malfunction resulting in sudden acceleration and an absence of any verification of the validity of the theory."); Federico v. Ford Motor Co., 854 N.E.2d 448, 452 (Mass. App. Ct. 2006) (EMI expert testimony excluded where "[t]he plaintiff provided no evidence that [the expert's] theories had been accepted by the relevant scientific community; indeed, statements from other studies in evidence specifically rejected [the expert's] conclusions. There was evidence that [the expert] had not tested his theory successfully, and he acknowledged that it would be difficult, if not impossible, to do so. He testified at his deposition that he had been unable to cause a vehicle to accelerate spontaneously through the introduction of transient electronic signals."). More recently, on August 30, 2011, Judge Carr in Buck v. Ford Motor Co, 2011 WL 3843871 (N.D. Ohio), issued an opinion wherein he found Dr. Armstrong's identical theory to be unreliable because his theory has not been tested and has not been formally peer-reviewed.

At the Daubert hearing, Mr. Armstrong spoke at length about Ford documents which acknowledged problems with various cruise control systems, the phenomenon of EMI discussed in text books and electronic designs that can reduce EMI interference. In his filings, he insists that his theory is not the type which "can or should be subjected to testing, just as these days we don't expect to have to prove the existence of gravity." (Armstrong Aff. 22 [DN 71-1].) Instead, he utilizes design verification and failure modes and effects analyses "for the simple reason that there could be millions, if not billions, of possible pathways to failure." (Id.) These are the identical assertions made by Mr. Armstrong to Judge Carr in Buck v. Ford. Judge Carr rejected them and wrote:

Without testing, all Armstrong has done is identify a hypothesis. It may be a sound one, but the courts must necessarily lag behind science. Untested hypotheses, even if plausible, are insufficient to satisfy Rule 702. E.g., <u>Rider v. Sandoz Pharm. Corp.</u>, 295 F.3d 1194, 1202 (11th Cir. 2002) ("The courtroom is not the place for scientific guesswork, even of the inspired sort."); see also <u>Tamraz v. Lincoln Elec. Co.</u>, 620 F.3d 665, 670 (6th Cir. 2010) (explaining that a "working hypothesis" is not "admissible scientific knowledge").

Armstrong provides no explanation for the analytical leap that the general engineering principles he describes apply to motor vehicles in general and the NGSC system in particular. "Nothing in either Daubert or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by

the ipse dixit of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion offered." Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997).

Buck, 2011WL3843871 at *6.

Plaintiff's counsel urged this Court not to place too much reliance upon Judge Carr's decision because he was not presented with documents related to Ford Explorers in the United Kingdom. These documents, however, fail to close the analytical gap which exists here. Mr Armstrong's testimony is simply that EMI could possibly be the reason the vehicle in question suddenly accelerated from a dead stop. He offers the opinion without verifying it in any way. Neither he nor any one else he knows of has ever been able to make it happen. "To be deemed reliable, the methodology underlying an expert's conclusions must be scientifically valid." Junk v. Terminix Intern. Co., 628 F.3d 439, 448 (8th Cir. 2010) (quotation omitted). In other words, "[s]peculative testimony should not be admitted." Id. See Ward v. Chesapeake Appalachia, L.L.C., 2009 WL 2913447, at *3 (E.D. Ky. Sept. 8, 2009) ("[The expert's] testimony is extremely speculative, and is based on patently insufficient and unreliable data and methodology.... The unreliable nature of [the expert's] testimony, and the very high error rate which naturally accompanies such speculative testimony, also require that his testimony be excluded under Daubert." (citing Wynacht v. Beckman Instruments, Inc., 113 F. Supp. 2d 1205, 1207 (E.D. Tenn. 2000))).

The Court agrees with Judge Carr's conclusion about Mr. Armstrong. Given the absence of testing or any physical verification of Armstrong's posited phenomenon, his testimony is the type of speculative testimony <u>Daubert</u> was intended to exclude.

IV. CONCLUSION

For the foregoing reasons, **IT IS HEREBY ORDERED** that Defendant's Motion to Exclude

the Testimony of Plaintiff's Expert Keith Armstrong [DN 59] is GRANTED .

cc. Counsel of Record