

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION**

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HENROB LIMITED,

Plaintiff/Counter-Defendant,

v.

Case No. 05-CV-73214-DT

BÖLLHOFF SYSTEMTECHNICK GMBH & CO.  
and BÖLLHOFF RIVNUT, INC.,  
BAYERISCHE MOTOREN WERKE AG, BMW NA,  
ROLLS-ROYCE MOTOR CARS LTD.  
and ROLLS-ROYCE NA,

Defendants/Counter-Plaintiffs.

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**OPINION AND ORDER DENYING DEFENDANTS' MOTIONS TO STRIKE**

This litigation involves two patents, U.S. Patent No. 5,752,305 (the “305 Patent” and U.S. Patent No. 5,779,127 (the “127 Patent”), which deal with the self-piercing riveting technology invented by Plaintiff/Counter-Defendant Henrob Limited (“Henrob”). On October 25, 2006, the court issued an order pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996), construing the two Patents. Pursuant to that construction, the parties agree that the main issue in this litigation involves the degree of inward lateral material flow caused by the patented device and the accused device. Now before the court is a “Motion for Summary Judgment of Invalidity of the ‘305 Patent,” filed by Defendants/Counter-Plaintiffs, Böllhoff Systemtechnik GmbH & Co., and Böllhoff Rivnut, Inc., (collectively “Böllhoff”) and Defendants Bayerische Motoren Werke AG, BMW NA, Rolls-Royce Motor Cars Ltd., and Rolls-Royce NA (collectively “BMW”). Related to this motion,

Defendants have filed two motions to strike, seeking to limit the evidence on which Henrob can rely. The court heard oral argument on December 19, 2008. For the reasons set forth below, the court will deny the motions.

### **I. Motion to Strike “Unreliable and Unsupported Test Results”**

Defendants first move to strike all evidence and arguments which rely upon or concern the Long Strip Multi-Rivet Test (the “LSMR Test”). The LSMR Test is one of three different tests on which Henrob’s expert, Dr. Jack Hu, relies to show the degree of lateral material flow caused by Defendants’ accused devices and the patented devices.<sup>1</sup> Defendants contend that the LSMR Test is unreliable and not scientifically proven. Defendants further argue that the LSMR test “has nothing to do with Lateral Material Flow and would only cause jury confusion and unfairly prejudice Defendants.” (Dkt. # 281, Defs.’ Mot. to Strike at 1.) Henrob responds that Defendants arguments go to the weight, not the admissibility of the LSMR Test. For the reasons discussed below, the court agrees with Henrob and will allow the jury to consider the LSMR Test, subject to Defendants’ cross-examination and competing evidence.

#### **A. Standard**

Federal Rule of Evidence 702 provides that:

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.

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<sup>1</sup>Dr. Hu also relies upon the Scribed Line test and the Drilled Hole test, neither of which are challenged by Defendants in these motions.

In *Daubert v. Merrell Dow Pharm., Inc.*, the Supreme Court held that, when faced with a proffer of expert scientific testimony, the trial judge is assigned “the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” 509 U.S. 579, 580 (1993). This ruling was later interpreted by the Court to apply to all expert testimony, not only scientific testimony. *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 141 (1999).

The party proffering the expert bears the burden of persuading the trial court that the expert has specialized knowledge that will aid the fact finder in understanding the evidence or determining a fact at issue. *Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 251 (6th Cir. 2001) (citing *Daubert*, 509 U.S. at 592 n. 10). The trial court has wide discretion when determining whether to admit or exclude opinion testimony. *United States v. Paris*, 243 F.3d 286, 288 (6th Cir. 2001).

## **B. Discussion**

Dr. Hu’s extensive experience and qualifications in mechanical engineering and materials science make clear his status as an expert. The challenge here is not to that status but focuses on one of the tests upon which Dr. Hu relies to form his expert opinion.

According to Dr. Hu, “[t]he LSMR test is one method used to study the effect of pre-clamping on lateral material flow . . . . [It] is an effective method to visually discern and compare the amount of lateral material induced deformation experienced by the sheets joined together by a riveting process.” (Dr. Hu Aff. at ¶ 14, Pl.’s Ex. 2.) Dr. Hu describes the LSMR Test as follows:

The LSMR Test is conducted by joining long, flat, rectangular strips of material together with a series of rivets placed along the long axis of the rectangular strips. If the materials being joined together experience inward lateral material flow during the riveting process, the long flat strips of material will show a concave deformation caused by the inward lateral movement of the sheet materials at the rivet sites. Conversely, if the materials being joined together do not experience inward lateral material flow as they are joined together with the riveting process, the long flat strips of material will show very little concave deformation. . . .

Because the rivets are inserted along a single axis in the LSMR test, the strip of material shows the cumulative effect of the concave deformation created by the lateral material flow by “curling” along that axis. The greater amount of inward lateral material flow experienced by the materials as they are joined together, the greater the amount of concave deformation in the materials, which in turn, creates a greater amount of “curling” in the long strips of material. This “curling” effect allows a person to visually compare the amounts of lateral material flow induced deformation created by the riveting process used to join the long strips of material.

(*Id.* at ¶¶ 15-16.) Thus, Dr. Hu, and therefore Henrob, contends that the LSMR Test, while focused on the visible deformation of the sheets, can effectively measure, or at least provide a visual comparison, of the relative degree of lateral material flow because it is the lateral material flow, according to Dr. Hu, which causes the visual distortion.

Defendants, on the other hand, rely upon the opinion of Dr. Ulm, Defendants expert, that the LSMR Test shows only the presence of vertical distortion, and cannot be used to identify inward lateral flow. (Ulm Decl. at ¶¶ 55-57, Defs.’ Ex. 9.)

Defendants contend that, while the LSMR Test itself is not necessarily flawed, there is no evidence that the LSMR Test can be used to gauge lateral material flow. Moreover, according to Defendants, use of the LSMR Test would unfairly prejudice Defendants as it would lead to jury confusion. Defendants claim that the LSMR Test lacks any indicia of reliability to accurately measure material flow and should therefore be excluded.

Contrary to Defendants' argument, the court finds that their challenges to the LSMR Test amount to credibility challenges, not admissibility challenges. Defendants contend that the LSMR Test is not a recognized method of showing lateral material flow in the scientific community. Referring to Federal Rule of Evidence 702, the Supreme Court stated in *Daubert* that “[n]othing in the text of this Rule establishes ‘general acceptance’ as an *absolute prerequisite* to admissibility.” *Daubert*, 509 U.S. at 588 (emphasis added). Rather, the expert’s testimony must be the result of scientific knowledge. *Id.* at 589.

The adjective “scientific” implies a grounding in the methods and procedures of science. Similarly, the word “knowledge” connotes more than subjective belief or unsupported speculation. The “term applies to any body of known facts or to any body of ideas inferred from such facts or accepted as truths on good grounds.” Of course, it would be unreasonable to conclude that the subject of scientific testimony must be “known” to a certainty; arguably, there are no certainties in science. “Indeed scientists do not assert that they know what is immutably ‘true’-they are committed to searching for new, temporary theories to explain, as best they can, phenomena.” “Science . . . represents a process for proposing and refining theoretical explanations about the world that are subject to further testing and refinement.” But in order to qualify as “scientific knowledge” an inference or assertion must be derived by the scientific method. Proposed testimony must be supported by appropriate validation- i.e., “good grounds,” based on what is known.

*Id.* at 590 (internal citations omitted). Citing this passage, the Sixth Circuit has stated:

By defining evidentiary reliability in terms of scientific validity, the *Daubert* Court instructed district courts that their primary function as “gatekeepers” is “to determine whether the principles and methodology underlying the testimony itself are valid” - not to second guess the validity of conclusions generated by otherwise valid methods, principles, and reasoning. *United States v. Bonds*, 12 F.3d 540, 556 (6th Cir.1993). Although there is no single criterion for determining whether a specific scientific methodology is reliable, the *Daubert* Court identified several factors that a district court should consider when evaluating the scientific validity of expert testimony, notably: the testability of the expert's hypotheses (whether they can be or have been tested), whether the expert's methodology has been subjected

to peer review, the rate of error associated with the methodology, and whether the methodology is generally accepted within the scientific community. See *Daubert*, 509 U.S. at 593-94, 113 S.Ct. 2786.

*Pride v. BIC Corp.* 218 F.3d 566, 577 (6th Cir. 2000). Thus, as stressed by the Sixth Circuit, the court's role is not to second guess the validity of conclusions, only to ensure that an appropriate scientific method is used. In order to determine this, the court is not restricted to the factors listed in *Daubert*, nor is any one factor determinative. Rather,

The Court in *Daubert* identified several factors that may bear on the inquiry, but took care to emphasize that the inquiry is "a flexible one." [*Daubert*] at 594, 113 S.Ct. 2786. In *Kumho*, the Court reiterated that the factors mentioned in *Daubert* were neither definitive, nor exhaustive, and may or may not be pertinent to the assessment in any particular case. *Kumho*, 526 U.S. at 141, 119 S.Ct. 1167. Noting that the *Daubert* factors will often be appropriate in determining reliability, the Court in *Kumho* found that the trial court must consider whether the factors are reasonable measures of reliability in a given case. *Id.* at 152, 119 S.Ct. 1167.

*Nelson*, 243 F.3d at 251.

Here, in the court's wide range of discretion, the court finds that Henrob has met its burden in showing the reasonable reliability of the LSMR Test. The court is persuaded that Dr. Hu's opinion rests on more than "speculative assumptions," as Defendants assert. He presents an objectively reasonable basis for his opinion that the LSMR Test is an effective method of visually discerning lateral material flow, or at least the effects of lateral material flow. The LSMR test itself is accepted even by Defendants as a reliable method of testing distortion. It is Dr. Hu's reasoned opinion, based on his considerable experience and studies, that the distortion is caused by lateral material flow. The court acknowledges that Defendants' experts think otherwise. Nonetheless, after reading Dr. Hu's declaration, the court cannot conclude that Dr. Hu's theory is based on mere speculation. Instead, the court finds that Dr. Hu's methodology with the

LSMR Test is valid, and will leave it to the fact-finder to determine whether the conclusions he suggests should be drawn from it are also valid. On this point, Defendants will be free to cross-examine Dr. Hu and challenge his reasoning and conclusions.

Nor does the court find that introduction of this evidence will lead to jury confusion or unfairly prejudice Defendants under Federal Rule of Evidence 403. Rule 403 provides for exclusion if the “probative value [of the evidence] is *substantially* outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury.” Fed. R. Evid. 403 (emphasis added). This standard is not easily met. Defendants rely on the same arguments regarding the alleged unreliability of the LSMR Test to ask for exclusion. Because the court has already rejected these arguments, the court will not exclude the evidence under Rule 403.<sup>2</sup>

## **II. Motion to Strike the Declarations of Russell J. Trinick and Dr. S. Jack Hu**

Defendants have also moved to strike the declarations of Russell J. Trinick and Dr. S. Jack Hu, which Henrob filed on October 6, 2008 in opposition to Defendants motion for summary judgment of patent invalidity. Defendants contend that these two declarations were not disclosed in compliance with the court’s January 4, 2008 scheduling order which provided that the deadline for exchanging initial expert reports was April 4, 2008. Defendants contend these declarations should be stricken because

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<sup>2</sup>The court also rejects Defendants’ unsupported argument that only the Scribed Line test should be relied upon because Henrob allegedly referred to it as the “gold standard” test during the prosecution history.

Mr. Trinick was never disclosed as an expert and Dr. Hu's most recent declaration contains opinions not previously disclosed to Defendants.

#### **A. Standard**

Federal Rule of Civil Procedure 37(c)(1) provides in part that “[a] party that . . . fails to disclose information required by Rule 26(a) or 26(e)(1) . . . is not, unless such failure is harmless, permitted to use as evidence at a trial, at a hearing, or on a motion any witness or information not so disclosed.” Additionally, Federal Rule of Civil Procedure 16(b) requires the court to prepare a scheduling order, which can be modified only upon a showing of good cause. “[A] court choosing to modify the schedule upon a showing of good cause, may do so only ‘if it cannot reasonably be met despite the diligence of the party seeking the extension.’” *Leary v. Daeschner*, 349 F.3d 888, 906 (6th Cir. 2003) (citing Fed. R. Civ. P. 16, 1983 advisory committee’s notes; *Inge v. Rock Fin. Corp.*, 281 F.3d 613, 625 (6th Cir. 2002)). Before modifying the scheduling order the court should also consider whether the opposing party will suffer prejudice by virtue of the amendment. *Id.*

#### **B. Discussion**

Defendants contend that Dr. Hu's October 2008 declaration should be stricken because it contains opinions previously undisclosed to Defendants. Defendants intimate that Henrob should have simply attached Dr. Hu's expert report in opposition to Defendants' summary judgment motion, and that Henrob is not allowed to submit a new declaration. Henrob argues that the previous expert report was not admissible evidence as required under Federal Rule of Civil Procedure 56 and that Dr. Hu's declaration merely incorporated his previous opinions in a sworn statement, distilled somewhat and



made more appropriate in form for a summary judgment opposition. As an initial matter, the court is not persuaded that Henrob was restricted solely to Dr. Hu's expert report. The purpose of Rule 56 is to examine all admissible evidence and declarations, even new declarations, are commonly submitted so long as they do not fundamentally alter or inappropriately expand on (or contradict) the witness's previous testimony or evidence. Just as, at trial, Henrob may rely on Dr. Hu's live testimony, Henrob may now rely on his declaration. The court agrees that it would circumvent the court's scheduling order and the Federal Rules if Henrob were to introduce altogether new expert opinion in the present declaration. Defendants, however, have not shown that Dr. Hu's declaration does so. In their opening brief, Defendants identified three passages as examples of opinions not contained in Dr. Hu's May 2, 2008 rebuttal report. In Henrob's response, however, it persuasively shows that each of the disputed passages was in effect contained in the May 2, 2008 rebuttal report, with only *extremely* minor variations. (See Henrob's Resp. at 5-6.) Other than these three passages, which the court finds were included in substance in Dr. Hu's May 2, 2008 rebuttal report, Defendants fail to specifically identify any opinions which were not previously disclosed. Defendants' factually unsupported and conclusory claim that "Dr. Hu's October 2008 Dec. *clearly* goes beyond merely rewording his opinions" (Defs.' Reply at 4)(emphasis added), does not persuade.

With respect to Mr. Trinick, Defendants contend that portions of his declaration should be stricken because although he was never disclosed as an expert his declaration at times ventures into the realm of expert testimony. Trinick's declaration relates to tests he performed and the results of those tests, which Defendants agree are

factual in nature and were previously disclosed to Defendants. (Defs.' Mot. at 7.)

Defendants do not dispute that the bulk of Trinick's declaration contains factual information and is "therefore, not the subject of this motion to strike." (Defs.' Mot. at 7.)

Defendants claim, however, that Trinick's October 2008 declaration "goes beyond just reciting these tests and the results thereof – it includes Trinick's analysis, opinions, and conclusions regarding these tests." (*Id.*) Defendants thus imply that, not only is this information, expert testimony, but that it is previously undisclosed testimony which is untimely under the court's scheduling order.

Henrob points out, much as it did with respect to Dr. Hu's challenged declaration, that the paragraphs identified in Defendants' opening brief<sup>3</sup>, paragraph numbers 5 and 28-33, appeared "virtually verbatim" in Trinick's lab report, which was provided to Defendants on May 2, 2008.<sup>4</sup> (Pl.'s Resp. at 9-10 & Pl.'s Ex. 5.) Henrob further contends that they are not seeking to introduce Trinick's testimony as an expert, but as a lay witness who, as an employee of Henrob, will testify about tests he performed during this litigation. Federal Rule of Civil Procedure 701 governs the testimony of lay witnesses and provides:

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<sup>3</sup>Defendants challenge two additional paragraphs, numbers 14 and 19, in their reply brief, but the court will not consider factual arguments first raised in a reply brief.

<sup>4</sup>Defendants apparently did not previously challenge Trinick's May 2008 lab report, which contains the same alleged "expert" opinions as does his October declaration. Instead, they attached the report to their opening brief. Henrob argues that by attaching the report to their brief, Defendants opened the door to any use of the information contained therein. While the court is not prepared to simply adopt Henrob's argument in this regard, Defendants' lack of initial objection to and reliance on the lab report does undercut any argument they may have with regard to prejudice or unfair surprise.

If the witness is not testifying as an expert, the witness' testimony in the form of opinions or inferences is limited to those opinions or inferences which are (a) rationally based on the perception of the witness, (b) helpful to a clear understanding of the witness' testimony or the determination of a fact in issue, and (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702.

Fed. R. Evid. 701. As previously stated, the parties agree that most of Trinick's declaration contains admissible lay testimony relating to facts perceived when performing tests during the process of this litigation. The court is persuaded that the additional challenged statements, while bordering on Rule 702 testimony, reasonably fall within the confines of Rule 701. The challenged opinions provide context to the tests performed, Trinick's reasons for performing the tests the way he did and the reasons why he believes these tests are preferable to the tests performed by Defendants' expert, Mr. MacDonald. Even if more detailed than the typical lay testimony, courts allow lay testimony to testify not only on facts but also for the reasons for those facts. See *Andrews v. Columbia Gas Transmission Corp.* 544 F.3d 618, 626 n. 8 (6th Cir. 2008) (noting that testimony of employees is allowed as lay witnesses with "actual knowledge of the company policies, regulations, procedures, and reasons for such policies." (citations omitted)).<sup>5</sup> It is unreasonable to expect a lay witness to testify solely about the data from his factual tests (admittedly admissible) but to be forbidden to

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<sup>5</sup>In *Andrews*, the Sixth Circuit cited with approval language from *Columbia Gas Transmission Corp. v. Davis*, 33 F. Supp. 2d 640, 642-43 (S.D. Ohio 1998) which allowed such employee-lay testimony when "[t]he factual testimony which was admitted was within the perception and special knowledge of each of the witnesses and helped to explain why the pipeline company policy required removal of the trees within the easement right-of-way."

defend that data. Under the circumstances of this case, Trinick's testimony is admissible under Rule 701.

## V. CONCLUSION

For the reasons stated above, IT IS ORDERED that Defendants' "Motion to Strike Evidence and Arguments Concerning Unreliable and Unsupported Test Results" [Dkt. # 281] is DENIED .

IT IS FURTHER ORDERED that Defendants' "Motion to Strike the Declarations . . ." [Dkt. # 282] is DENIED.

S/Robert H. Cleland  
ROBERT H. CLELAND  
UNITED STATES DISTRICT JUDGE

Dated: December 23, 2008

I hereby certify that a copy of the foregoing document was mailed to counsel of record on this date, December 23, 2008, by electronic and/or ordinary mail.

S/Lisa Wagner  
Case Manager and Deputy Clerk  
(313) 234-5522