

introduce expert testimony from Graham, the former head of the Office of Information and Regulatory Affairs and an expert in the cost-benefit analysis of product safety requirements. Graham prepared an expert report regarding whether the costs of adopting SawStop outweighed its costs. Doc. 155-2. Graham opined that \$753 was the “switchpoint cost” of SawStop. *Id.* at 13. As Graham explained: “The ‘switchpoint cost’ refers to the maximum cost increase in a typical table saw that can be justified by a BCA [benefit-cost analysis] of an automatic safety system [like SawStop]. If a safety system costs more than the switchpoint value, the safety system is too expensive. If the safety system costs less than the switchpoint value, the benefits of the system outweigh the costs.” *Id.* at 11. Graham arrived at the \$753 figure by using a complicated formula, which is set forth in his report (Doc. 155-2 at 11-15) and described in *Wielgus*, 2012 WL 3543682, at *11.

The only relevant detail regarding the formula is that one of its many inputs is the assumed effectiveness rate of SawStop technology. Graham’s report assumed that SawStop would prevent injuries 90% of the time. Doc. 155-2 at 12. The report “based” this assumption “on expert testimony that the SawStop™ system will prevent injury in the vast majority of cases (Gass 2009).” *Ibid.* The “Gass” referenced in “(Gass 2009)” is Dr. Stephen Gass, the inventor of SawStop and one of Stollings’s other experts. The “2009” refers to two depositions that Gass gave in 2009, where he testified that “SawStop ... prevents people from cutting their fingers off in the vast majority of cases,” Doc. 233-3 at 14, and that in the “vast majority” of cases, the approach speed of the saw user’s hand is slow enough to allow SawStop to activate before the hand hits the blade, Doc. 233-4 at 13-14; Doc. 229-13 at 3, 5.

At oral argument on Defendants' motion to exclude Graham, the court focused on several issues, among them being the reliability (or lack thereof) of Graham's assumption of a 90% effectiveness rate. 6/12/12 Tr. at 86-121. Defendants had briefly argued in their motion to exclude that the 90% assumption was made "without any basis whatsoever." Doc. 102 at 12. Stollings did not address the issue in his response brief, Doc. 155, and Defendants did not mention it in their reply, Doc. 202. Even if Defendants had not raised the issue, the court would have been obligated to do so *sua sponte* to fulfill its gatekeeper role under Rule 702. *See ATA Airlines, Inc. v. Fed. Express Corp.*, 665 F.3d 882, 889-96 (7th Cir. 2011) (holding that a district judge must exclude a proposed expert's testimony even if the opposing party does not articulate the reason why the expert's testimony was unreliable). At the conclusion of the oral argument, the court invited the parties to file supplemental memoranda addressing, among other issues, the reliability of Graham's 90% assumption. 6/12/12 Tr. at 121, 204-05.

Stollings filed his supplemental memorandum on June 22, 2012, one month and one day prior to trial. Doc. 229. Although the court's request for supplemental briefing was intended to solicit only the parties' views on whether the data cited in Graham's initial report—Gass's 2009 deposition testimony that SawStop will prevent injury "in the vast majority of cases"—provided a reliable basis for the 90% assumption, Stollings attached to his supplemental memorandum a supplemental report from Graham. Doc. 229-3. Neither the supplemental memorandum nor the supplemental report explained how Gass's deposition testimony provided a reliable basis for the 90% assumption. Instead, the memorandum stated that Graham's supplemental report "expands upon the basis for that estimate" by detailing three circumstances in which SawStop would not prevent injury. Doc. 229 at 2; *see also* Doc. 229-3 at 2 (stating that "three failure modes ...

provide support for the 90% effectiveness estimate”). Specifically, the supplemental report opined that: (1) about five percent of blade injuries on saws with SawStop technology occur when the saw is off or winding down; (2) three percent of such injuries occur when the user bypasses SawStop technology; and (3) two percent of such injuries occur when the user’s hand moves so rapidly that SawStop cannot activate in time to prevent the injury. Doc. 229-2 at 2-3. The five percent, three percent, and two percent figures add up to ten percent, which when subtracted from one hundred percent yields the exact 90% effectiveness figure assumed in Graham’s initial report.

The five percent, three percent, and two percent figures, or the data supposedly underlying those figures, were not disclosed in Graham’s initial report. Indeed, Graham confirmed in depositions given in other cases shortly before and after submitting his initial report in this case that the 90% assumption did not account for users bypassing SawStop, Doc. 254 at 9-10, 17, did not account for non-powered blade contact injuries, *id.* at 14, and relied only on Gass’s “vast majority” testimony and unspecified statements by the Consumer Product Safety Commission, *id.* at 11-13, 16, 20-22. *See* Doc. 271 (overruling Stollings’s objection to considering depositions given by Graham in other cases to evaluate the admissibility of Graham’s testimony in this case).

Graham’s disclosure of the five percent, three percent, and two percent figures, and the underlying data, was untimely. Graham’s initial report was served in September 2010. Doc. 155-2. Rule 26(a)(2)(B) required that Graham’s report set forth “a complete statement of all opinions [he] will express and the basis and reasons for them” and “the facts or data considered by [him] in forming them.” Fed. R. Civ. P. 26(a)(2)(B). “[T]he intention is that ‘facts or data’

be interpreted broadly to require disclosure of any material considered by the expert, from whatever source, that contains factual ingredients.” Fed. R. Civ. P. 26(a)(2)(B), Advisory Comm. Note, 2010 Amendments. Stollings filed Graham’s supplemental report long after expert discovery had closed and only a month before trial, in the midst of the parties’ preparations for what turned out to be an intense two-week trial. Yet Stollings offered no justification for why the materials cited in the supplemental report were not disclosed earlier; indeed, given that the bulk of those materials pre-dated the initial report, no plausible justification was possible. Defendants would have been prejudiced had Stollings been allowed to supplement Graham’s opinion in such a significant way one month before trial; deposing Graham yet again would have been expensive and also would have detracted from Defendants’ trial preparation. It cannot be said that the tendering Graham’s supplemental report at such a late date was either “substantially justified or ... harmless.” Fed. R. Civ. 37(c)(1). It therefore was appropriate to strike Graham’s supplemental report to the extent it offered new theories and data to support the 90% assumption. *See Trilogy Commc’ns, Inc. v. Times Fiber Commc’ns, Inc.*, 109 F.3d 739, 744 (Fed. Cir. 1997) (affirming the district court’s exclusion of a supplemental expert report, filed after the expert discovery deadline, that “contained new opinions and information and did not merely supplement the original report”); *Rowe v. Int’l Corp. v. Ecast, Inc.*, 586 F. Supp. 2d 924, 934-36 (N.D. Ill. 2008) (striking a supplemental expert declaration to the extent it set forth new opinions and analyses).

The question thus becomes whether Graham’s testimony is admissible on the basis of his initial report. Rule 702 provides that “[a] witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of 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.” Fed. R. Evid. 702; *see also Happel v. Walmart Stores, Inc.*, 602 F.3d 820, 824 (7th Cir. 2010). The district court serves as the “gate-keeper who determines whether proffered expert testimony is reliable and relevant before accepting a witness as an expert.” *Winters v. Fru-Con Inc.*, 498 F.3d 734, 741 (7th Cir. 2007) (internal quotation marks omitted). The expert’s proponent bears the burden of proving by a preponderance of the evidence that the testimony satisfies Rule 702. *See Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 705 (7th Cir. 2009).

Graham’s opinion that \$753 is the switch-point cost of adding SawStop to a table saw is only as reliable as the numerical inputs used in his calculation, including the assumption that SawStop has a 90% effectiveness rate. Under Rule 702, that “assumption[] ... must rest on [an] ‘adequate [basis],’ ... and cannot be the product of mere speculation.” *Park v. El Paso Bd. of Realtors*, 764 F.2d 1053, 1067 (5th Cir. 1985) (citation and internal quotation marks omitted); *see also United States v. Brown*, 7 F.3d 648, 6553 (7th Cir. 1993) (“expert testimony [must] be rejected if it lacks an adequate basis in fact”) (internal quotation marks omitted). Accordingly, if the assumption lacks the reliability expected by experts in the field, Graham’s testimony must be excluded. *See Junk v. Terminix Int’l Corp.*, 628 F.3d 439, 448 (8th Cir. 2010) (affirming the exclusion of expert testimony due, in part, to expert’s “reliance on unfounded assumptions in his comparative method”); *Universal Church v. Geltzer*, 463 F.3d 218, 226 (2d Cir. 2006) (reversing the admission of expert testimony due, in part, to the expert’s unjustified assumption that the

debtor's "expenses were essentially the same each year"); *Park*, 764 F.2d at 1067-68 (holding that expert testimony regarding damages should have been excluded because the expert's inputs were unreliable); *Victory Records, Inc. v. Virgin Records Am., Inc.*, 2011 WL 382743, at *1-4 (N.D. Ill. Feb. 3, 2011) (excluding expert testimony regarding damages because the expert's inputs were based on unreliable assumptions).

The only basis asserted in Graham's initial report for assuming a 90% effectiveness rate was Gass's 2009 deposition testimony that SawStop prevented injury in a "vast majority of cases." As Magistrate Judge Kim explained in excluding Graham's materially identical testimony in another case involving a Ryobi-brand saw, Gass's deposition testimony does not support Graham's 90% assumption:

[Graham] does not explain how he extrapolates from Dr. Gass's testimony that SawStop works in "the vast majority of cases," that the 90% figure is appropriate. Would 80% also represent a "vast majority"? Would 65%? Without further explanation from Dr. Graham, it appears as though he plucked the 90% number more or less out of thin air, and [the plaintiff] has done nothing in his response to clarify or justify this 90% figure.

Wielgus, 2012 WL 3643682, at *12. Moreover, Gass's deposition testimony reveals that he was simply observing that a saw user's hand rarely moves so rapidly that SawStop would not have time to activate. Thus, Gass's "vast majority" testimony did not account for the fact that saw users occasionally press a switch to disable or bypass SawStop technology in certain situations to avoid a false activation, such as when cutting electrically conducted material like wet or treated wood; because Graham's assumption rests exclusively on Gass's testimony, this means that Graham's initial report did not account for this fact either.

Graham was well aware that users might disable SawStop. Four months before submitting his initial report in this case, Graham was questioned at a deposition in another case about the possibility of users bypassing SawStop, and he replied that he had not accounted for it in the report he submitted in that case. Doc. 254 at 9-10. The initial report Graham submitted in this case acknowledged the possibility of bypass, Doc. 155-2 at 7 n.4 (“The SawStop™ system can be operated in ‘Bypass Mode’ if electrically conductive materials need to be cut, and the user needs to prevent the brake from activating.”), but Graham did nothing to account for that possibility in conjuring his assumption that SawStop has a 90% effectiveness rate. And when deposed again about bypass five months after submitting his initial report in this case, Graham stated that he did not know how often users bypassed SawStop. Doc. 254 at 17-18.

Graham’s failure in his initial report to consider the possibility of bypass is especially confounding given the undisputed evidence that saw users occasionally disable safety features that they find inconvenient. In this case, Stollings did not use the manual blade guard that came with his saw; in fact, he did not even take the guard out of its package. Plaintiff’s own expert, Robert Holt, testified that eight out of 100 wet boards caused SawStop to falsely activate. 7/30/12 Tr. at 1498. Such “false positive” activations of SawStop are costly and time consuming, requiring the user to change the brake cartridge and replace the saw blade. It stands to reason that a material number of users would SawStop when cutting material that can falsely activate SawStop. Graham’s failure to account for this behavior robs his report of the reliability expected by an expert in his field. Indeed, Gass himself acknowledged in his initial report how crucial it is to consider the possibility that a user will deactivate a safety device when considering

the device's effectiveness. Doc. 155-2 at 5-6 (discussing the superiority of active/automatic safety devices compared to passive/manual safety devices).

The foregoing grounds justify the court's order granting Defendants' motion to exclude Graham's expert testimony. Magistrate Judge Kim's opinion in *Wielgus* offered other grounds for excluding Graham's testimony in that case. It is unnecessary to address those additional grounds here, but if it were necessary to reach them, the court would agree with Magistrate Judge Kim's analysis and exclude Graham's testimony on those grounds as well.

October 10, 2012



United States District Judge