## In the

# United States Court of Appeals For the Seventh Circuit

No. 13-3398

ADAM HARTMAN,

Plaintiff-Appellant,

v.

EBSCO INDUSTRIES, INC., et al.,

Defendants-Appellees.

Appeal from the United States District Court for the Northern District of Indiana, South Bend Division. No. 3:10-CV-528-TLS — **Theresa L. Springmann**, *Judge*.

Argued April 14, 2014 – Decided July 10, 2014

Before WOOD, *Chief Judge*, and POSNER and FLAUM, *Circuit Judges*.

FLAUM, *Circuit Judge*. Adam Hartman's father gave him a muzzleloading rifle in 1994. Like many older muzzleloaders, the gun was designed to use black powder as a propellant. As such, the muzzleloader ignited newer, pelletized propellants erratically. In 2008, Hartman installed a kit on his gun—sold by KR Warranty, the maker of the rifle—that modified the muzzleloader and enabled it to ignite new pro-

pellants more reliably. The next day, Hartman was sighting in his "upgraded" muzzleloader when the gun unexpectedly discharged as he was trying to load it. The surprise firing of the weapon caused the ramrod and a patched round ball to pass through Hartman's hands and arm, inflicting serious injury. Hartman sued KR Warranty on theories of negligence and strict liability. However, Indiana has a ten-year statute of repose for products-liability actions, and his gun was then fourteen years old. There are two exceptions to the statute, but we agree with the district court that Hartman cannot satisfy either of them. We affirm.

#### I. Background

KR Warranty began manufacturing the LK-93 Wolverine muzzleloader in 1994 (the company was then called Modern Muzzleloading, and the guns themselves sold under the Knight Rifles brand). That same year, Hartman's father gave him a Wolverine. Hartman used the rifle for years; by his estimate, he fired it between 500 and 600 times before his accident.

As originally manufactured, the Wolverine used a #11 percussion cap as its firing mechanism. A percussion cap uses a volatile chemical to provide a spark that ignites the primary black powder charge when struck by the gun's hammer or striker bolt. *See generally 10 Innovations that Led to the Modern Bullet, Fulminate of Mercury/Percussion Cap,* HOW STUFF WORKS, http://www.howstuffworks.com/10-bullet-innovations4.htm#page=4 (last visited July 9, 2014). Once ignited, this black-powder charge propels the gun's projectile—either a bullet or a patched round ball (a lead ball wrapped in lubricated cloth)—out of the barrel. The mechan-

ical part of many modern muzzleloaders—with "in-line" locks, rather than older "sidelock" guns—looks like this:

primer barrel or cap (with powder and saboted striker on nipple striker spring safety bullet) striker 0 breech plug (threaded for removal) trigger trigger striker

Parts of the In-Line Action

Kalkomey Enters., Inc., *In-Line Muzzleloader*, TODAY'S MUZZLELOADER COURSE, http://www.hunter-ed.com/muzzle loader/studyGuide/In-Line-Muzzleloader/222099\_700062667 (last visited July 9, 2014) (modified).

Many newer muzzleloader models employ a primer-cap mechanism—originally designed for use in shotguns which provides a hotter spark when struck by the striker. Primer caps allow muzzleloader users to eschew black powder as a propellant in favor of synthetic Pyrodex pellets (which are manufactured by nonparty Hodgdon). Hartman tried to use Pyrodex pellets in his percussion-cap-equipped Wolverine at some point after the pellets were introduced, but the pellets require hotter temperatures for ignition and the Wolverine would not reliably spark them. In November 2008, Hartman bought a Knight 209 Primer Extreme Conversion Kit for his Wolverine. KR Warranty also manufactured the conversion kit. The kit replaced the #11 percussion-cap firing system with a #209 shotgun-primer system. The conversion kit was meant to deliver a hotter spark and thereby ignite Pyrodex pellets more reliably. Hartman installed the kit himself on November 28, 2008.

The next day Hartman and a few friends went to a gravel pit to sight in the rifle. Hartman fired two shots and did not swab the Wolverine's barrel between shots. He fired a conical bullet with his first shot and a patched round ball with the second. Before attempting to load the rifle for a third shot, Hartman put a primer cap on the nipple of the breech plug (see the above diagram), though he knew that a live primer cap should not be put on the nipple before loading. He then loaded two Pyrodex pellets into the muzzle of the rifle followed by another patched round ball. Hodgdon warns against using patched round balls with Pyrodex pellets, because using round balls instead of bullets when firing Pyrodex pellets carries an increased risk of unexpected discharge. Hartman attempted to seat the patched round ball in the barrel of the gun with a ramrod. The Wolverine then unexpectedly discharged, causing both the ramrod and the round ball to pass through both of Hartman's hands and his right forearm.

On November 24, 2010, Hartman filed suit against several defendants in the Elkhart Circuit Court. For purposes of this appeal, the relevant defendants are KR Warranty and EBSCO Industries; in 1998, EBSCO acquired the stock of KR Warranty's corporate predecessor, Modern Muzzleloading. Hartman originally named a third defendant, PI, Inc.— which bought the Knight Rifle line in 2010—but the district court's grant of summary judgment for PI was unopposed. KR Warranty remains under the EBSCO corporate umbrella but appears to exist for the limited purpose of administering warranties for and claims against pre-PI sale rifles. The defendants quickly removed the case to federal district court. (From here on out, we'll refer to the defendants just as "KR Warranty," because as we'll see, Hartman waived any arguments related specifically to corporate parent EBSCO.) The district court ultimately granted summary judgment for KR Warranty, concluding that Indiana's statute of repose which sets a ten-year outer limit on products liability actions in Indiana—barred Hartman's claim.

#### II. Discussion

We review the district court's grant of summary judgment de novo. Olson v. Morgan, 750 F.3d 708, 713 (7th Cir. 2014). Indiana's statute of repose ordinarily bars cases where "the damages incurred by plaintiff occurred more than ten years after the product was first placed in commerce," Dague v. Piper Aircraft Corp., 418 N.E.2d 207, 211 (Ind. 1981); Ind. Code § 34-20-3-1. The statute is of course designed to remove the specter of open-ended liability on product manufacturers for very old products. See, e.g., Stump v. Ind. Equip. Co., 601 N.E.2d 398, 402 (Ind. Ct. App. 1992). Hartman was injured fourteen years after the purchase of his Wolverine. But there are two exceptions to the statute: (1) where a manufacturer refurbishes a product to extend its useful life, or (2) where a defective new component is incorporated into the old product. Richardson v. Gallo Equip. Co., 990 F.2d 330, 331 (7th Cir. 1993). The question we face is whether one of these exceptions can breathe life into Hartman's case, though our analysis of the second exception will require us to address the district court's partial exclusion of Hartman's expert's testimony.

### A. Extension of useful life

The first exception to the statute of repose resets the limitations period where there is "any reconstruction or reconditioning … which has the effect of lengthening the useful life of a product beyond what was contemplated when the product was first sold." *Richardson*, 990 F.2d at 331. However, in *Richardson* (which, despite our inability to give a definitive interpretation to a state statute, has been accepted by Indiana courts as a reasonable reading, *see*, *e.g.*, *Florian v*. *Gatx Rail Corp.*, 930 N.E.2d 1190, 1201 (Ind. Ct. App. 2010)), we reasoned that the repose period is not reset by mere product upgrades or by adding new components that do not lengthen the product's useful life. *Richardson*, 990 F.2d at 331–32.

Hartman cannot take advantage of this exception for two reasons. First, he cannot show that the conversion kit extended the useful life of his gun. Second, we doubt that the statute of repose could ever be reset by a user-installed component like the conversion kit.

Hartman's expert, gunsmith Steven Howard, argued that the 209 conversion kit makes the Wolverine more accurate, more reliable, and gives it a higher muzzle velocity—making it, in effect, "an entirely new rifle." But KR Warranty's unrebutted expert testimony gives Hartman's claim the lie: it seems the only useful metric of a muzzleloader's lifespan is its barrel and bore. The conversion kit may make the gun more powerful, but it has no effect on either the barrel or bore and therefore has no effect on how long the gun will be usable. In other words, it is irrelevant that a change enhances the product's performance if it does not *also* extend its useful life.

Hartman also argues that black powder muzzleloaders were no longer commonly used when he installed the conversion kit, so, in his view, the conversion kit did extend the useful life of the gun. But just because an item's performance seems comparatively poor as technology improves doesn't mean the product is obsolete for the purposes of the statute of repose. Consider, for example, an old laptop computer. An upgraded processer that increased the computer's speed would make the computer more desirable, but would not extend its life. The computer could otherwise continue to function as it always had-even if other, faster computers became available and the performance of the old laptop now seemed comparatively inadequate. On the other hand, substituting a new battery for one on its last legs would extend the computer's useful life—the new battery would be necessary to ensure that the computer could still function in the way it always had. This is the type of reconditioning that can reset the statute of repose. But modifications like the conversion kit fall squarely into the upgrade camp.

We note that even if Hartman could show that the conversion kit did extend the life of his muzzleloader, we still doubt whether the first exception to the statute would apply. The usual case invoking this exception involves a "manufacturer-refurbished" product—i.e., a product that is retrofitted or given new life by the manufacturer of the original product. *See Carlson Rests. Worldwide, Inc. v. Hammond Prof'l Cleaning Servs.*, 2:06-CV-336, 2008 WL 4889687, at \*4 (N.D.

Ind. Nov. 12, 2008) (concluding that the statute of repose was reset where the manufacturer modified the product after it reached the consumer in order to extend its useful life); Miller v. Honeywell, Inc., IP98-1742-C-M/S, 2001 WL 395149, at \*6 (S.D. Ind. Mar. 7, 2001) (the first exception to the statute of repose applies "if the manufacturer rebuilds the product, to the point of significantly extending the life of the product and rendering it in like-new condition."). In contrast, we are not aware of any case in which a manufacturer is held responsible for selling a *non-defective* new component, but the consumer or another party installs the component incorrectly. Cf. Denu v. W. Gear Corp., 581 F. Supp. 7, 8 (S.D. Ind. 1983) ("[T]he introduction into commerce of a reconditioned product by a manufacturer may give rise to expectations of safety which would support a products liability action."). If a consumer is injured by a defective new component, his relief from the statute's time bar comes under the second exception, not the first.

#### **B.** Defective new component

We turn now to the second exception to the statute of repose. This exception applies where a manufacturer "merely ... incorporat[es] a defective component into an old product." *Richardson*, 990 F.2d at 331. This exception might reach two different scenarios. First, suppose a manufacturer issues a new component for an old product and the new component is not itself defective. Suppose too that the old product is not defective; however, when the new component is added to the old product, the old product becomes unsafe by some meshing of components new and old. The exception would permit the owner of the old product to sue the manufacturer despite the passage of more than a decade. A second scenario would be if the new component is itself defective. In this case, the term "exception" is really a misnomer. The suit would be permitted because the manufacturer cannot escape products liability by placing the shoddy new component (which would ordinarily be subject to suit for a decade if it stood on its own) into an older product that happens to be protected by the statute of repose. *Id.* 

Hartman claims there were two product defects: a failure to warn and a design defect. We'll first deal with his argument that KR Warranty failed to warn him about the danger of accidental discharge from not swabbing the barrel of the rifle between shots. When Hartman received the Wolverine in 1994, the instructions told him to swab the barrel between shots while sighting in—but the warning was phrased only as a "recommendation" and was concerned with accuracy, not safety. KR Warranty did include actual warnings in its 2007 and 2011 "Born to Hunt" manuals, which may have accompanied new Knight Rifles sold at those times. Hartman argues that KR Warranty's inclusion of warnings in those other manuals shows that it should have included the same warning in 2008, when Hartman bought the conversion kit. But the district court granted summary judgment for KR Warranty partly because it found that KR Warranty had no duty to warn with respect to the conversion kit in the first place.

It's not entirely clear what Hartman is arguing about KR Warranty's claimed failure to warn, though as we'll see, it doesn't make much of a difference in this case. At oral argument, Hartman's counsel told us that he wished to focus on "the original Wolverine muzzleloader rifle, ... [which] was defective as equipped with the ... conversion kit." This

implies that Hartman was advancing a theory-consistent with the first scenario we posited—that neither the muzzleloader nor the conversion kit was defective, but that the muzzleloader became defective once it was outfitted with the conversion kit. Yet Hartman's brief seems to argue that the conversion kit was a defective product standing alone, because the recessed face of the conversion kit's new breech plug made it more likely that latent embers could get trapped in the breech plug and thereby prematurely ignite newly loaded propellant. Both parties agree that this recessed-face design was not itself a defect and was a necessary feature for the Wolverine to be able to ignite #209 primers. The problem, Hartman says, is that KR Warranty should have warned him about the dangers of latent embers when it sold him the conversion kit. This argument goes to the second permutation of the statute of repose exception that we discussed above.

We do not need to sort out which one of these claims Hartman wishes to pursue, however, because both versions depend on the same showing. In order to survive summary judgment, Hartman must show that the conversion kit *increased* the risk of latent embers or unexpected discharge beyond what already existed in the Wolverine. Why? Because if the installation of the conversion kit did not increase the existing risk of the gun accidentally firing, then KR Warranty's duty to warn (if ever there was one) arose in 1994, when Hartman purchased the gun. And in that case, the statute of repose would bar Hartman's action because the conversion kit introduced no new defect that would reset the ten-year clock (the statute of repose applies to failure to warn claims, just as it does to any other products liability action, *Johnson v. Kempler Indus., Inc.,* 677 N.E.2d 531, 536 (Ind. Ct. App. 1997)). Moreover, if the conversion kit did not increase the likelihood of latent embers, then it could not itself have been defective, either—because it would not have introduced a new risk into the operation of the Wolverine. Hartman would therefore be unable to proceed with his suit alleging a defect in the conversion kit alone.

Because of the showing Hartman must make, our review actually turns on the district court's decision to exclude portions of Steven Howard's testimony. Howard testified that the 209 breech plug did in fact increase the likelihood of latent embers, so if his testimony should have been included, then Hartman survives summary judgment (as we resolve any factual disputes in his favor at this stage).

It is for the district court, pursuant to Federal Rule of Evidence 702, to serve as gatekeeper on expert testimony, ensuring that such testimony is "not only relevant, but reliable." Daubert v. Merrell Dow Pharms., 509 U.S. 579, 589 (1993). The rubric for evaluating the admissibility of expert evidence considers whether the expert was qualified, whether his methodology was scientifically reliable, and whether the testimony would have assisted the trier of fact in understanding the evidence or in determining the fact in issue. Bielskis v. Louisville Ladder, Inc., 663 F.3d 887, 893 (7th Cir. 2011). An expert's methodology can be evaluated by considering its error rate, whether the methodology has been or is capable of being tested, whether it has been subject to peer review, and whether it is generally accepted in the relevant community of experts. Id. The district court employed the correct legal standards in evaluating the admissibility of Howard's expert testimony, so we review the district court's

application of those standards for abuse of discretion. *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 705 (7th Cir. 2009).

Howard's qualifications as an expert were not challenged. But the district court nonetheless found Howard's testimony inadmissible under *Daubert*. Howard's testimony was purportedly based on common sense, as he indicated that it was logical to conclude that a recessed face is more likely to retain embers than the concave design of the old breech plug. However, the district court was unimpressed, because Howard's theory was unsupported by evidence. The court noted:

Howard did not perform any kind of testing to prove that the 209 breech plug is more likely to retain latent embers. He introduced no evidence that his theory has been subjected to peer review or publication, or has been generally accepted among other firearms experts. He did not discuss the known or potential error rate of his theory relating to the 209 breech plug. He stated, instead, that "the problem of latent sparks in this Danger zone is easily foreseeable especially during the design process and this problem should have been addressed when the 209 Conversion Kit was in the developmental stage."

*Hartman v. EBSCO Indus., Inc.,* 3:10-CV-528-TLS, 2013 WL 5460296, at \*11 (N.D. Ind. Sept. 30, 2013). Hartman points to no evidence that would contradict the district court's findings. Thus, the court's reasoned decision was not an abuse of discretion.

Hartman's next claim of defect is that KR Warranty should have included a modified cleaning jag with the con-

version kit. A jag is a tool that screws on to the end of the ramrod and is inserted into the barrel of the muzzleloader between shots to clean the barrel and clear away debris and latent embers that might cause accidents. The testimony of Hartman's expert Howard was again pivotal. Howard testified that KR Warranty's failure to include a specially designed jag—one that could reach into the recessed face of the 209 breech plug—made the product defective. In support, Howard designed and made a model of a new jag with a special tip that would supposedly fit into the recessed breech plug and better wipe away any embers that might be left behind. However, Howard's new jag had never been used, his design had not been tested, and no similar jag was in use anywhere in the industry.

The district court excluded Howard's alternative jag. Under Indiana law, expert testimony is required in order to show a design defect where the defect's existence depends on matters beyond the common understanding of lay jurors. *Cansler v. Mills*, 765 N.E.2d 698, 706 (Ind. Ct. App. 2002); *see also Witted v. Gen. Motors Corp.*, 58 F.3d 1200, 1206 (7th Cir. 1995) (noting, in applying Indiana law, that "to allow a plaintiff to establish the existence of a design defect by his mere assertion is ludicrous"). The court found that Howard's methodology was unreliable and would not assist the trier of fact. *See Bielskis*, 663 F.3d at 893. The court noted that Howard's methodology was not "scientifically reliable, … [had] not been tested, or subjected to peer review or publication[, and that] his jag model [had] never been used in a working firearm." *Hartman*, 2013 WL 5460296, at \*9.

Hartman argues that the district court committed a legal error by too rigidly applying the *Daubert* factors without

adapting its inquiry to firearms experts. He says that the Supreme Court's decision in Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137 (1999), eschewed a rigid application of the "scientific" factors of *Daubert*, and that district courts must take such a flexible approach in evaluating testimony. Hartman correctly states the law, but it does not help him here. The hallmark of the Supreme Court's expert testimony cases is still reliability. "The objective of [Daubert] is to ensure reliability and relevancy of expert testimony. It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." Kumho, 526 U.S. at 152. Howard's modified jag was incomplete, inoperable, and unlike those used by KR Warranty or its competitors. Howard's musings on the jag's superiority cannot "substitute for scientific methodology and [are] insufficient to satisfy Daubert's most significant guidepost": reliability. Chapman v. Maytag Corp., 297 F.3d 682, 688 (7th Cir. 2002). The district court was within its "considerable leeway" in finding Howard's testimony and his alternative jag unreliable. *Kumho*, 56 U.S. at 152.

Even if the district court's reliability determination was incorrect, it had a second rationale for excluding the jag that is independently sufficient. The court found the jag irrelevant. Expert testimony is inadmissible if it is not helpful to the trier of fact, because it would not have "aid[ed] the jury in resolving a factual dispute." *Deimer v. Cincinnati Sub-Zero Prods., Inc.,* 58 F.3d 341, 345 (7th Cir. 1995). The testimony must "fit the issue to which the expert is testifying [and be] tied to the facts of the case." *Id.* (internal quotation marks omitted). An alternate jag—even if one could have been feasibly marketed with the conversion kit—would not have made a difference here because Hartman did not swab the barrel of his Wolverine before it discharged. The statute of repose cannot be reset if a new component, even if defective, did not cause the injury. *Black v. Henry Pratt Co.*, 778 F.2d 1278, 1283 (7th Cir. 1985).

We conclude by noting that even if Hartman were able to survive summary judgment against KR Warranty, he would still have no case against EBSCO. EBSCO had nothing to do with the Wolverine or the 209 conversion kit. EBSCO had no relationship with KR Warranty in 1994, as it did not acquire KR's stock until 1998. From that point forward EBSCO owned, but did not operate, KR Warranty. KR Warranty continued to have its own operations and separate officers. The district court found this corporate-parent relationship insufficient to expose EBSCO to Hartman's claim. Hartman nominally appeals the grant of summary judgment for EBSCO, but makes no mention of the district court's corporate-parent holding. The arguments are therefore waived. *See, e.g., Wachovia Secs., LLC v. Banco Panamericano, Inc.,* 674 F.3d 743, 758 (7th Cir. 2012).

The district court's grant of summary judgment is AFFIRMED.