

November 6, 2006

In the
United States Court of Appeals
for the Fifth Circuit

Charles R. Fulbruge III
Clerk

m 05-50673

BRAZOS RIVER AUTHORITY,

Plaintiff-Appellant,

VERSUS

GE IONICS, INC.,

ALSO KNOWN AS IONICS, INCORPORATED, ET AL.,

Defendants,

GE IONICS, INC.,

ALSO KNOWN AS IONICS, INCORPORATED;

CAJUN CONSTRUCTORS, INC.,

FORMERLY KNOWN AS CAJUN CONTRACTORS, INC.,

Defendants-Appellees.

Appeal from the United States District Court
for the Western District of Texas

Before SMITH and STEWART, Circuit Judges,
and HANEN, District Judge.*

JERRY E. SMITH, Circuit Judge:

The Brazos River Authority (“BRA”) appeals a judgment after a jury trial in its suit for breach of contract, breach of implied warranties, and fraud against GE Ionics, Inc. (“Ionics”), and Cajun Constructors, Inc. (“Cajun”), arguing that the district court improperly excluded evidence. Finding reversible error, we vacate and remand.

I.

BRA is responsible for developing and managing the water resources of the Brazos River Basin; as part of its duties it operates the Lake Granbury Surface Water and Treatment System (“SWATS”). Because Lake Granbury has a high concentration of salts, SWATS used a process called electrodialysis reversal (“EDR”) to reduce the salt content of the water. Ionics designed and manufactured the original “Mark III” EDR system installed at SWATS in 1989.

The fundamental working unit of the EDR system is a “stack,” which consists of alternating layers of membranes and plastic spacers. The spacers contain channels through which water flows. Electric current is applied to the stack, and the resulting electrical field separates the salt ions out of the water, reducing the mineral content. Other EDR components relevant in this appeal are the electrodes, which are large metal plates that transfer electricity; electrode cable assemblies, by which voltage is supplied to the electrodes; electrode spacers, which are special thicker spacers

adjacent to the electrodes; and stack siding, which are large plastic protective coverings for the stacks.

In the 1990’s Ionics developed the “Mark IV” or third generation (“3G”) spacers for its next generation Mark IV EDR stack systems. Ionics also made a retrofit version of the spacer for use in older Mark III systems known as the “3G retrofit,” “retrofit screen,” and the “retrofit” spacer. In 1996 BRA concluded that it needed to expand the capacity of SWATS to meet customer demand. The parties disagree about many of the details after this point.

Ionics proposed that BRA could increase its capacity by using the retrofit spacers. BRA accepted the proposal and announced the job for public bid. Cajun Constructors, Inc. (Cajun), submitted a bid and was awarded the prime contract, then entered into a subcontract with Ionics whereby Ionics agreed to retrofit the stacks with the new spacers. Cajun and Ionics performed the retrofit in 1998 and 1999. BRA alleges, and brought evidence at trial, that after the retrofit it began experiencing problems with the plant (so that the water quality decreased), problems that culminated in fires in June 2001 and March and April 2002. BRA closed the SWATS plant in December 2002.

BRA sued in state court, *inter alia*, Ionics and Cajun, alleging negligence, negligent misrepresentation, fraud, breach of implied warranty of good and workmanlike performance, breach of implied warranty of merchantability, breach of implied warranty of fitness for a particular purpose, strict liability in tort, and breach of contract. The suit was removed to federal court. Before trial the district court dismissed the tort claims on account of the contractual relationship among the parties; the dismissal of the tort claims was not appealed.

* District Judge of the Southern District of Texas, sitting by designation.

The jury rendered a verdict in favor of Ionics and Cajun on all the remaining claims.

II.

The standard of review for evidentiary rulings is abuse of discretion. If, however, the district court applies the wrong legal rule, the standard is *de novo*. *Moss v. Ole S. Real Estate, Inc.*, 933 F.2d 1300, 1305-06 (5th Cir. 1991).¹

A.

BRA argues that the district court incorrectly applied Federal Rule of Evidence 404(b), by excluding, as to an inanimate object as distinguished from a natural person, evidence meant to prove action in conformity with character. We agree this was serious error. Specifically, the court erred in excluding evidence of fires at other facilities on the basis of rule 404(b).

Rule 404(b) provides that “[e]vidence of other crimes, wrongs, or acts is not admissible to prove the character of a person in order to show action in conformity therewith” (emphasis added). This rule is applied most frequently in the criminal law context, *Aetna Cas. & Sur. Co. v. Guynes*, 713 F.2d 1187, 1193 (5th Cir. 1983), and we have limited its application to civil actions “where the focus is on essentially criminal aspects,” *Crumpton v. Confederation Life Ins. Co.*, 672 F.2d 1248, 1253-54 n.7 (5th Cir. 1982). An example is a civil action for trade secret misappropriation in which the plaintiff seeks to introduce evidence of the

defendant’s having taken proprietary trade secrets before from a prior employer (because this would prove “propensity” to commit misappropriation).

As BRA correctly points out, the propensities of a particular person to act a certain way are not at issue in this case, which involves the properties and functions of inanimate objects (EDR components) at various facilities. The rule talks about the character of a “person,” and there is no person whose character BRA is trying to prove.

Given that it was error to exclude evidence of similar occurrences on the basis of rule 404(b), we ask whether that error is harmless. *Compaq Computer Corp. v. Ergonome Inc.*, 387 F.3d 403, 408 (5th Cir. 2004). We “may not disturb the district court’s exclusion of the evidence . . . if that ruling can be upheld on other grounds, regardless of whether the court relied on those grounds.” *Metallurgical Indus., Inc. v. Fourtek, Inc.*, 790 F.2d 1195, 1207 (5th Cir. 1986). We “will not reverse erroneous evidentiary rulings unless the aggrieved party can demonstrate ‘substantial prejudice.’” *Viazis v. Am. Ass’n of Orthodontists*, 314 F.3d 758, 767 (5th Cir. 2002) (citation omitted).

In *Davidson Oil Country Supply v. Klockner, Inc.*, 917 F.2d 185 (5th Cir. 1990) (per curiam) (on petition for rehearing), we held that exclusion of evidence of similar occurrences was not harmless, so a new trial was required. We explained that exclusion of similar occurrences seriously hindered the presentation of plaintiff’s case and that the “scarcity of instances of Ferrotubi pipe failure” turned into “affirmative proof” of the lack of defect, discrediting the plaintiffs’ witnesses and creating “an atmosphere so unreal and so prejudicial” as to require remand: “Our original opinion

¹ Alternatively, this standard can be phrased as stating that an error of law is an abuse of discretion. See *United States v. Buck*, 324 F.3d 786, 791 (5th Cir. 2003) (noting that district court abuses discretion where decision to admit evidence is based on error of law).

reflects the exclusion of a substantial volume of relevant evidence which created an atmosphere of disbelief for the claims and defenses of DOCS. This atmosphere of disbelief permeated the entire trial and tainted the jury findings.” *Id.* at 186. We noted that against the two isolated failures, the proffered and excluded evidence reflected approximately thirteen failures of Ferrotubi tubing that contributed to the discrediting of DOCS’s witnesses, who were limited to telling of only two failures in Klockner-supplied Ferrotubi materials. *Id.* We explained that “this atmosphere of disbelief permeated the entire trial and tainted the jury findings,” permitting it to find for Klockner despite “spectacular admissions” that it had made, *id.*, as shown by (for example) admitted Klockner documents acknowledging a “tremendous quality problem with the Ferrotubi material,” *Davidson Oil Country Supply v. Klockner, Inc.*, 908 F.2d 1238, 1244 (5th Cir. 1990). We also held that the evidence of similar failures was not irrelevant, because it was offered to prove that the Ferrotubi products contained a latent manufacturing defect and because it was “clearly relevant to the questions of merchantability and good faith.” *Id.* at 1245.

Ionics contends that *Davidson* is distinguishable because, unlike the situation there, in the instant case significant evidence against Ionics has been introduced at trial. Nonetheless, although there was evidence acknowledging, as in *Davidson*, a tremendous quality problem with Ionics material, that evidence, as in *Davidson*, could not dispel the atmosphere of disbelief created by the exclusion of evidence of the failure of Ionics equipment. Although this case is slightly closer than was *Davidson*, because more evidence against the defendants appears to have been introduced here, the exclusion of this evidence is not harmless, because we cannot say with positive

assurance that the jury would have decided the same way had it been admitted.²

We agree with BRA that a crushing majority of the evidence of other fires was excluded, so the excluded evidence is not merely cumulative. In *Johnson v. William C. Ellis & Sons Iron Works, Inc.*, 609 F.2d 820 (5th Cir. 1980) (on petition for rehearing), it was reversible error to exclude certain treatises, because although “the substance of these publications was effectively placed before the jury,” *id.* at 823, by expert evidence, the “direct quotation from a number of sources would have been more dramatic and might have been more persuasive,” *id.* “[It] is not for us to decide that the effect of what was excluded might not have altered the jury’s views,” *id.*, because there was a “reasonable likelihood,” *id.*, that a substantial right was affected.

We also do not view lightly the evidence Ionics presented to the jury to the effect that BRA had failed to maintain the EDR plant to specifications (*e.g.*, had failed to maintain required pressures; to perform required maintenance tasks such as salt CIP’s; to tend to hot spots timely; and to replace corroded components) and to the further effect that this created a propensity for product malfunction. But we cannot say with positive assurance that the evidence of other fires would not have influenced the jury in believing BRA’s rebuttal of some of Ionics’ maintenance arguments³ by indicating

² See *EEOC v. Manville Sales Corp.*, 27 F.3d 1089, 1095 (5th Cir. 1994) (“[W]e cannot say with conviction that this [excluded] evidence would not have affected the jury’s determination.”).

³ Some of the rebuttal evidence provided by BRA seems to indicate that the failure to maintain the required pressures was a result of tending to the
(continued...)

that there was a problem with Ionics's equipment independently of the maintenance issues.

Ionics also argues that *Davidson* is inapplicable because it dealt with merchantability issues arising from the sale of a product (the pipe), while this case deals with claims about system design, which are not covered by UCC implied warranties. We disagree.

The law implies a warranty that goods are fit for some particular purpose where the seller, at the time of the transaction, has reason to know of the particular purpose for which the goods are required and the buyer is relying on the seller's skill or judgment to select or furnish suitable goods. *See* TEX. BUS. & COM. CODE ANN. § 2.315 (Vernon 1994). The particular purpose must be a particular non-ordinary purpose. The complex and specialized nature of the retrofit makes its purpose non-ordinary.

BRA purchased goods from Ionics during the retrofit and allegedly relied on Ionics's special skills and representations that the retrofit goods (the new thin membranes) were fit to replace the goods that were changed during the retrofit (thicker membranes) and would work with BRA's other existing components to produce more water at the same or higher quality than previously was the case. Therefore, the so-called "design" claim relating to the compatibility of the retrofit goods with the

pre-existing components is included in BRA's claim for breach of implied warranty of fitness for a particular purpose. We reject defendants' argument that the warranties claims fail because no defect existed at the time of delivery; like *Davidson*, this case deals with a latent defect.

B.

As we have said, we will not remand for a new trial if the evidence erroneously excluded could nonetheless be barred on another ground. Ionics argues that the evidence was properly excluded under rules 402 and 403 of the Federal Rules of Evidence as irrelevant or prejudicial. For this analysis, it is immaterial whether the district court actually rejected evidence on these grounds.⁴

Relevant evidence means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence. FED. R. EVID. 401. "Evidence of similar accidents might be relevant to the defendant's notice, magnitude of the danger involved, the defendant's ability to correct a known defect, the lack of safety for intended uses, strength of a product, the standard of care, and causation." *Ramos v. Liberty Mut. Ins. Co.*, 615 F.2d 334, 338-39 (5th Cir. 1980).

The excluded documents show that most fires occurred in high-voltage environments; that many may have occurred as a result of failure of the shrink-wrap insulated bars; and

³(...continued)

hot spots, which were a natural result of the plastics used during, and the higher voltage of, the retrofit; that the failure to do the CIP's was a result of the fact that Ionics had failed to supply the needed pump for a considerable amount of time; that manual, non-pump CIP's were not feasible because of some barriers created by the retrofit; and that components corroded faster than before the retrofit.

⁴ Although the district court noted at the pretrial conference that it would admit evidence of similar occurrences if BRA proved similarity (which suggests the court was concerned about rules 402 and 403), at trial it seemed to rely mostly on rule 404(b).

that all involved the same flammable stack siding as that at BRA. Therefore, the evidence is not excludable as irrelevant under rule 402. The higher voltage environment is not merely problematic as a design flaw, but relates, as explained, to the warranty of fitness for a particular purpose.

The higher voltage was required by the new thin membranes installed during the retrofit: Because the membranes were thinner, there were more of them occupying the space than before the retrofit, so they held a larger volume of water per minute, which in turn required more voltage for desalination. This larger volume was the express purpose of the retrofit to enable BRA to produce more desalinated water per unit of time.

Thus, BRA is not attempting to bring breach of warranty claims as to the stack siding and shrink-wrap bars that were installed before 1998 and that would be barred by the statute of limitations. Rather, BRA is arguing that the components installed during the retrofit were not fit for the purpose of working together with the pre-existing stacks to desalinate water, as shown by BRA's obtaining a variance after the retrofit because the water exceeded the acceptable salinity levels. That is, given BRA's special needs resulting from the tendency of some of its existing components to fail in high-voltage environments, Ionics should not have recommended the retrofit product, such as the thin membranes, that required a high voltage environment.

Although Ionics urges that the district court properly excluded evidence of other fires because the circumstances of the BRA fires were unique, the law in this circuit with respect to cases, such as this case or *Davidson*, that are not product liability cases, is that the degree of similarity is a question that goes to the weight

of the evidence (for the jury), not to admissibility. As long as there are similarities (as there are here), the differences are for the jury to decide.⁵ Similarly here, the issue, which is whether possible unique circumstances of the BRA fire (e.g., hot spots) made the BRA event distinguishable from other fires, goes to the weight of the evidence, not to admissibility.

“Evidence of similar accidents occurring under substantially similar circumstances and involving substantially similar products may be probative . . . [of any number of factors].” *Jackson v. Firestone Tire & Rubber Co.*, 788 F.2d 1070, 1082 (5th Cir. 1986). The question of admissibility of substantially similar accidents is necessarily determined on a case-by-case basis, with consideration to be given to any number of factors, including the product or component part in question, the plaintiff's theory of recovery, the defenses raised by the defendant, and the degree of similarity of the products and of the other accidents:

[T]he court's order in effect limits “similar accidents” to those involving the Firestone 5/ rim base and the Goodyear LW side ring. At trial plaintiff's expert testified that he was not aware of any other accidents involving those exact components. Appellees conclude rather disingenuously from this that “Mr. Jackson's accident was unique, and no other accidents were admissible.” . . . We decline to take such a narrow and

⁵ *Davidson*, 908 F.2d at 1246 (holding that much of the excluded evidence “showed similarity” and that “[t]he weight of that showing was for the jury”); see also *Jones & Laughlin Steel Corp. v. Matherne*, 348 F.2d 394, 400-01 (5th Cir. 1965) (“The differences between the circumstances of the two accidents could have been developed to go to the weight to be given such evidence. It cannot be held inadmissible[.]”).

unrealistic view of the matter.

... The “substantially similar” predicate for the proof of similar accidents is defined, again, by the defect (or, as we have also termed it, the product) at issue. If the disputed defect were restricted to the mismatch of these two parts, then the trial court’s ruling would have been correct. But if that defect is the danger of all multi-piece parts because of the great risk of poor fit, then some proof of other accidents involving multi-piece rims is admissible on the issue of the magnitude of the danger.

Id. at 1082–83.

The mere fact that some but not all of the fires involved the rather unique MK III-4 retrofit spacers (or hot spots) does not mean that they are not relevant and therefore admissible under the factors outlined above. BRA is arguing that the high voltage of the retrofit systemSSa consequence of the thinner membranes installed during the retrofitSStogether with the propensity of the shrink-wrap cable-bar assemblies and stack siding to ignite in high voltage environmentSSwas a breach of the implied warranties of fitness for a particular purpose and merchantability. Because all the other fires appeared to involve at least two of these characteristics, they are “similar” to the occurrence at BRA; the jury is to decide the weight to be given to any distinguishing factors.

Additionally, because the cause of the fires was a disputed issue at trial, the exclusion of some of this evidence may have prevented BRA from rebutting Ionics’s argument that poor maintenance was the cause. *See Ramos*, 615 F.2d at 338–39. Causation is relevant in this case (even if the tort claims were dismissed), because Ionics opened the door to that evidence by arguing (and presenting wit-

nesses) that its goods were merchantable and that the fires were not caused by its products, but by BRA’s poor maintenance of the products.⁶

Nor was the excluded evidence unfairly prejudicial. “Unfair prejudice” as used in rule 403 is not to be equated with testimony that is merely adverse to the opposing party. Virtually all evidence is prejudicial; otherwise it would not be material. The prejudice must be “unfair.” *Dollar v. Long Mfg., N.C., Inc.*, 561 F.2d 613, 618 (5th Cir. 1977). The evidence here was not inflammatory.⁷

Although there is some prejudice from forcing defendants to explain why the other fires were dissimilar, that burden is not unfair in this case, in which the similarities are not insignificant. In *Ramos*, although we noted that the GO-4 was installed vertically with a crane, while B-30 was scoped out horizontally and then lifted, we held that

⁶ For instance, one Ionics witness testified that the stack siding material was not a contributing factor to BRA’s fires, and another witness said the shrink shrink-wrap assemblies were not involved. Multiple Ionics witnesses testified that BRA improperly maintained the EDR stacks.

⁷ *See also Jackson*, 788 F.2d at 1082–83:

While [Firestone’s officer belief that the product will be outlawed in the future was] no doubt “prejudicial” to Firestone’s cause, it does not strike us as likely to induce an emotional response on the part of the jury, unless righteous indignation be classed as such. On the contrary, DiFederico’s memo reveals a very rational and calculated approach to corporate decision-making that a jury should have no difficulty understanding and evaluating. If the jury’s reaction is not a favorable one, then Firestone and DiFederico have only themselves to blame.

the evidence of the GO-4 failure was relevant and that the mast and collapse were sufficiently similar to be admitted. In addition, the GO-4 failure was not too remote in time from the B-30 collapse. The trial court generally has broad discretion in the admission of evidence, but that discretion does not sanction exclusion of competent evidence without a sound, practical reason. *Bailey v. Kawasaki-Kisen, K.K.*, 455 F.2d 392, 398 (5th Cir. 1972).

Ramos, 615 F.2d at 339-40.

III.

BRA argues that the district court erroneously excluded, under Federal Rule of Evidence 407, evidence of Ionics documents showing its investigations of and recognition of component problems. BRA explains that rule 407 applies only to measures taken after the injury for which the plaintiff sues; that the remedial measure has to be actually taken; and that post-accident plans, investigations, and testing do not constitute subsequent remedial measures.

For one of the following reasons, the evidence of changes made related to the products in question should not have been excluded:

(A) The injuries and/or harm to which any remedial measure might apply were the fires, but the claim for damages is for the alleged failure of the product to conform to the warranty of fitness for a particular purpose;

(B) the evidence was offered to rebut a defensive theory of causation; and

(C) many of the “remedial measures” either were not actual measures, or the measures were initiated before the problems

occurred.

By definition, rule 407 would not apply in these circumstances. Under that rule, when,

after an injury or harm allegedly caused by an event, measures are taken that, if taken previously would have made the injury or harm less likely to occur, evidence of the subsequent measures is not admissible to prove negligence, culpable conduct, a defect in a product, a defect in a product’s design, or a need for a warning or instruction.

FED. R. EVID. 407. We now examine each of these reasons in turn:

A.

BRA does not seek recovery for the damage caused by the fires, but for the failure of the products it purchased to achieve their intended purposes—to desalinate and produce water of acceptable quality. The cause of action is breach of warranty for the failure of the product to perform its intended purpose or a particular purpose.

Although the parties have not directed us to a rule 407 case on point, we note that a product can fail to perform as warranted without necessarily creating an “injury or harm” as contemplated by the rule 407. A “lemon” is not necessarily a safety hazard. Further, in a situation in which a “lemon” could present a safety hazard, a party could forego a recovery for that safety-related “injury or harm” and merely seek to recover the benefit of its bargain; the safety-related claim could be eliminated either voluntarily by a party narrowing its pleading, or involuntarily pursuant to rulings by the trial court.

In these instances, the primary rationale underlying rule 407 does not apply. The com-

mentary to the rule makes it plain that “the more impressive[] ground for exclusion rests on a social policy of encouraging people to take . . . steps in furtherance of added safety.” Advisory Committee’s Note to Rule 407. Thus, courts have excluded remedial measures because their admission would unduly risk that the factfinder would imply culpability for the injury or harm alleged. *See Mills v. Beech Aircraft Corp.*, 886 F.2d 758, 763 (5th Cir. 1989). In the instant case, that would not be an issue if recovery is not being sought for the injury or harm. The admission of evidence of changes made merely to improve a product, as distinguished from remedial measures that make an “injury or harm less likely to occur,” is not barred by the rule.

As noted, rule 407 bars the admission of remedial measures to prove “negligence, culpable conduct, a defect in a product, a defect in a product’s design, or a need for a warning or instruction.” FED. R. EVID. 407. The evidence at issue here does not go to the subject of negligence or culpability, because liability here is based on the warranties made and the failure of the product to work as warranted. A breach of warranty is proven by comparing the actual product’s condition with its warranted condition. “Rule 407 only applies when the remedial measure is offered to prove negligence or culpable conduct ‘in connection with the event.’ The reference is to the event that triggered the remedial measure.” 23 WRIGHT & GRAHAM, FEDERAL PRACTICE AND PROCEDURE § 5285 (2006). But, because there is some excluded evidence of product failure related to safety hazards in addition to that of product failure unrelated to that harm, we do not reverse the trial court’s evidentiary ruling on this ground as to that evidence.

B.

Rule 407 does not preclude the admission of subsequent remedial measures on grounds other than to prove culpability. Defendants countered BRA’s breach of warranty contention by arguing that the fires resulted from poor maintenance. This court has long recognized that subsequent remedial measures can be introduced on the issue of causation if that is in controversy.

In *Bailey*, 455 F.2d at 394, we were faced with an analogous situation. The plaintiff claimed a ship was unseaworthy because of a faulty crane. *Id.* The defendant countered that the boom had failed because of improper handling by the longshoremen. *Id.* The district court excluded, as a subsequent corrective measure, evidence that the boom subsequently fell and then operated appropriately when the excess grease was removed. *Id.* The exclusion of the evidence that grease was removed was the issue on appeal. The evidence “was not offered to prove that by removing [the grease], Shipowner, in effect, acknowledged that it was negligent Rather, it was offered in the context of Shipowner’s successful defensive theory to show the operational cause, not who was to blame” *Id.* at 396. This evidence rebutted defendant’s argument that the improper rigging of other longshoremen caused the injury. *Id.* at 394-96. Consequently, we held that the evidence was offered not to prove culpability, but rather to rebut the theory on proximate cause, so it was admissible. *Id.* at 396.

Similarly, some of the evidence excluded in the instant case also serves to rebut Ionic’s defense that the fires were caused by poor maintenance. The admission of the evidence was not barred by rule 407, and it should have been admitted to rebut defendant’s theory of causation.

C.

By definition, the rule excludes only post-accident remedial measures, so to the extent the district court excluded evidence of design changes or investigations that started before the June 2001 accident (*e.g.* the investigation of the shrink-wrapped clamping bar),⁸ that was error. We have declined to decide whether evidence of post-accident investigations is admissible. *See James v. Bell Helicopter Co.*, 715 F.2d 166, 174-75 (5th Cir. 1983). Today, however, we have the benefit of the accumulated wisdom of sister courts that have decided the question.

Unfortunately, these courts are split. Some take the strict literal interpretation that because, to be excluded under the rule, the measure must be one that could have been taken before the event that gave rise to the claim (and one cannot investigate an accident before it occurs), an investigation and report taken in response to an accident cannot be a measure that is excluded from evidence under the rule. *Ensign v. Marion County*, 914 P.2d 5 (Or. App. 1996). This position is subject to the criticism expressed in *Alimenta v. Stauffer*,

⁸For instance, exhibit P-110 was eventually admitted as redacted, weeks after the start of trial. It appears that it should have been admitted in full, because it explains on the first page that the starting date of the project/investigation was May 2001, a month before the first fire at BRA. Other documents also show that Ionics was concerned about the bars well in advance of the BRA fire. Exhibit P-155 was never admitted, though it conveys basically the same information as does exhibit P-110. Number P-112 was similarly wrongly excluded on rule 407 grounds, because its first two pages indicate that the investigation and testing of the mylar tape (the subject of the investigation/testing described in the document) started in 1999, well in advance of the fires.

598 F. Supp. 934, 940 (N.D. Ga. 1984), and *Martel v. Mass. Bay Transp. Auth.*, 525 N.E.2d 662, 664 (Mass. 1988), that the purpose of rule 407 is to encourage remedial measures that would be thwarted if the investigations from which such measures result were not undertaken in the first place for fear they would count as an admission.

Nonetheless, despite the appealing logic of the rule 407 policy, the text of that rule “only prohibits ‘evidence of a . . . subsequent measures,’ not evidence of a party’s analysis of its product. *Prentiss & Carlisle Co. v. Koehring-Waterous Div. of Timberjack, Inc.*, 972 F.2d 6 (1st Cir. 1992). “The fact that the analysis may often result in remedial measures being taken (as occurred here) does not mean that evidence of the analysis may not be admitted.”⁹ This argument is persuasive, because by themselves, post-accident investigations would

⁹ *Prentiss & Carlisle*, 972 F.2d at 9 (citing *Benitez-Allende v. Alcan Alumino do Brasil, S.A.*, 857 F.2d 26, 33 (1st Cir. 1988); *see also Rocky Mountain Helicopters, Inc. v. Bell Helicopters*, 805 F.2d 907, 918 (10th Cir. 1986) (upholding admission of helicopter manufacturer’s post-accident “stress test” of potentially defective part because “[i]t would strain the spirit of the remedial measure prohibition in Rule 407 to extend its shield to evidence contained in post-event tests or reports”). *See Fasanaro v. Mooney Aircraft Corp.*, 687 F. Supp. 482, 487 (N.D. Cal. 1988) (holding that although “the policy considerations underlying Rule 407 are to some extent implicated in the context of post-event tests,[] it would extend the Rule beyond its intended boundaries to include such tests within its ambit’ and that “[p]ost-event tests will not, in themselves, result in added safety”); *see also Wilson v. Beebe*, 770 F.2d 578, 590 (6th Cir. 1985) (“*Beebe*’s Rule 407 argument has no merit. The report did not recommend a change in procedures following the shooting; it was a report of that incident and nothing more.”).

not make the event “less likely to occur;” only the actual implemented changes make it so.¹⁰

Furthermore, as explained in *Westmoreland v. CBS, Inc.*, 601 F. Supp. 66, 67-68 (S.D.N.Y. 1984), although the logic expressed in cases such as *Alimenta* parallels that which underlies rule 407 (see Advisory Committee Note),

The fault of the argument is not in its logic but in that it goes too far and fails to credit the social value of making available for trial what is often the best source of information. CBS’ argument really goes beyond the issue of the admissibility of the investigative report; its logic addresses as well the admissibility of the facts uncovered by the investigation. If the internal investigator uncovered the “smoking gun,” it is often a cosmetic matter whether this evidence is received as a part of the investigative report or in some other manner. The question of social policy raised by CBS is whether in order to encourage such investigations, their fruits should be shielded from use by adverse claimants. There is, however, no such doctrine either as to the internal investigative report or as to facts revealed by it. In industrial and railroad accident litigation, for example, it is commonplace that such reports, or at least the facts revealed by them, are used by the injured to establish the liability of the company that conducted the investigation in spite of CBS’ arguments.

¹⁰ See also 2 WEINSTEIN ET AL., FEDERAL EVIDENCE (2d ed. 1997) § 407.06[1] (“It is only if changes are implemented as a result of the tests that the goal of added safety [under Fed. Rules Evid., rule 407] is furthered; and even then, it is only evidence of those changes that is precluded by the rule.”).

We note that *Specht v. Jensen*, 863 F.2d 700, 701-02 (10th Cir. 1988), and *Alimenta*, 598 F. Supp. at 940, are distinguishable because they involved an attempt by one party to admit a document specifically for the subsequent remedial measures it suggested. BRA offered to redact references to remedial measures actually implemented. Therefore, we do not find persuasive the Third Circuit’s reliance on those cases for the proposition that there is authority supporting the exclusion of evidence of post-accident investigations even if offered with redactions of references to post-remedial measures. See *Complaint of Consolidation Coal Co.*, 123 F.3d 126 (3d Cir. 1997).

We do not decide, however, whether reports of post-event investigations are always admissible if the actually-implemented remedial measures are redacted. Rather, under the circumstances of this case, excluding various reports under rule 407 was erroneous because it would have made the rule applicable to investigations, which by themselves do not make the accident less likely to occur, and, as to some evidence, it would have stretched the rule to apply to improvements unrelated to safety hazards.

Therefore, it was error to exclude exhibit P-41, discussing “corporate exposure to product components with marginal product performance,” such as the stack siding and the cable assemblies, on the basis of rule 407 to the extent that actually implemented remedial measures would have been redacted. Rule 407 prohibits evidence of measures, and those only if actually implemented, but does not proscribe discussions of causation and its relation to poor product performance.

Exhibit P-390 also was erroneously excluded on rule 407 grounds. That document discusses problems with and improvements to the

MK-IV stacks and the MK-III retrofit. A number of the improvements discussed in the document deal with improving product performance, not with increasing the safety of products to prevent accidents that may have occurred because of that product.

For instance, the document discusses reducing the voltage difference in MK-IV spacers so as to reduce the need for “better electrode edge tape.” It also talks about designing an electrode spacer specifically for the MK-III retrofit. Although these improvements would also have the added benefit of increasing safety, there is no indication in the document that these design changes were proposed for any reason other than to make the products better and last longer for the purpose for which they were made.

The case for admitting exhibit P-40, which was excluded based on rules 404(b) and 407, is even stronger. That document begins by explaining the history of the type of material used for the electrode connecting bars. Any design change described there that occurred before the 2001 fire is therefore not even problematic. The document then relates several instances of failure of this product—failures that did not engender any fires or present any safety issues.

Thus, this description of product failures cannot be considered a post-accident investigation, because there was no accident (producing “harm or injury”) to investigate. Rather, this merely shows a concern to improve a poorly-performing product, not to remedy a safety hazard. The document next discusses two fires, but they are not even BRA fires, so the only basis for exclusion of that material would be the rule 404(b) ruling,

which, as we have explained, is erroneous.¹¹

As with the excluded rule 404(b) evidence, the erroneously excluded rule 407 evidence could not have been excluded on other grounds. The evidence was relevant and did not engender any “unfair” prejudice. We do not decide whether, by itself, the exclusion of the rule 407 evidence was harmless, because in conjunction with the rule 404(b) exclusions the errors were not harmless.¹² As we explained in *Ramos*, 615 F.2d at 343, “After a long and hotly fought trial, an appellate court is reluctant to overturn the rulings of a district judge. Nevertheless, relevant evidence which engenders no unfair prejudice and which relates to the core of the dispute should not be summarily excluded.” Accordingly, we vacate and remand for retrial.

IV.

BRA argues that the district court improperly restricted BRA’s questioning of Cajun’s corporate representative, Todd Grigsby. BRA explains that, during pretrial discovery, it noticed the deposition of Cajun on a variety of

¹¹ We do not analyze individually the other excluded exhibits, but we trust that our discussion of the exhibits that are mentioned offers sufficient guidance on remand.

¹² We disagree with the defendants’ contention that BRA’s failure to call two additional witnesses after its last offer of proof was rejected (on the last day of its case-in-chief) precludes it from seeking a remand. Most of the rule 404(b) and 407 exclusions were reiterated and made at the offer-of-proof conference on the last day of BRA’s case-in-chief. Therefore, there is no indication that the district court would have changed its views as to the great majority of these documents, especially given the conviction with which it embraced the rule 404(b) arguments throughout the trial.

topics pursuant to Federal Rule of Civil Procedure 30(b)(6), and neither Ionics nor Cajun objected. Cajun designated Grigsby to testify on all topics on Cajun's behalf, and BRA deposed him.

At trial, BRA called Grigsby. It had previously designated excerpts from his testimony to be presented if he did not appear to testify; he did, however, appear. According to BRA, after a few questions, counsel for Cajun, joined by counsel for Ionics, objected to further examination of Grigsby on the ground that he lacked personal knowledge.

The district court ruled that BRA could elicit testimony from Grigsby if it was offered with respect to Cajun alone and did not reference Ionics; that Grigsby's testimony was inadmissible as to Ionics pursuant to Federal Rule of Evidence 602; and that Grigsby's testimony would be unduly prejudicial to Ionics because it would constitute hearsay as to Ionics and because Grigsby lacked personal knowledge. BRA was prohibited from asking any questions that would address whether any component supplied by Ionics was defective and from asking Grigsby about the warranty notice given by BRA to Cajun.

Rule 30(b)(6) is designed "to avoid the possibility that several officers and managing agents might be deposed in turn, with each disclaiming personal knowledge of facts that are clearly known to persons within the organization and thus to the organization itself."¹³ Therefore, the deponent "must make a conscientious good-faith endeavor to designate the persons having knowledge of the matters

¹³ 8A CHARLES A. WRIGHT, ARTHUR R. MILLER & RICHARD L. MARCUS, FEDERAL PRACTICE AND PROCEDURE § 2103, at 33 (2d ed. 1994).

sought by [the party noticing the deposition] and to *prepare* those persons in order that they can answer fully, completely, unevasively, the questions posed . . . as to the relevant subject matters."¹⁴ "[T]he duty to present and prepare a Rule 30(b)(6) designee goes beyond matters personally known to that designee or to matters in which that designee was personally involved."¹⁵ The deponent must prepare the designee to the extent matters are reasonably available, whether from documents, past employees, or other sources.¹⁶

"Obviously it is not literally possible to take the deposition of a corporation; instead, . . . the information sought must be obtained from natural persons who can speak for the corporation."¹⁷ Thus, a rule 30(b)(6) designee does not give his personal opinions, but presents the corporation's "position" on the topic. *Taylor*, 166 F.R.D. at 361. When a corporation produces an employee pursuant to a rule 30(b)(6) notice, it represents that the employee has the authority to speak on behalf of the corporation

¹⁴ *Bank of New York v. Meridien BIAO Bank Tanzania Ltd.*, 171 F.R.D. 135, 151 (S.D.N.Y. 1997) (citations omitted) (emphasis added); *see also Gucci Am., Inc. v. Costco Cos. Inc.*, 2000 WL 60209, at *3 (S.D.N.Y. Jan. 24, 2000); *SEC v. Morelli*, 143 F.R.D. 42, 45 (S.D.N.Y. 1992); *FDIC v. Butcher*, 116 F.R.D. 196 (E.D. Tenn. 1986); *Mitsui & Co. (U.S.A.), Inc. v. P.R. Water Res. Auth.*, 93 F.R.D. 62, 67 (D.P.R. 1981)).

¹⁵ *United States v. Taylor*, 166 F.R.D. 356, 361 (M.D.N.C. 1996) (citations omitted).

¹⁶ *Id.* (citations omitted); *see also Dravo Corp. v. Liberty Mut. Ins. Co.*, 164 F.R.D. 70, 75 (D. Neb. 1995); *Buycks-Roberson v. Citibank Fed. Sav. Bank*, 162 F.R.D. 338, 343 (N.D. Ill. 1995).

¹⁷ 8A WRIGHT, MILLER & MARCUS, *supra*, § 2103, at 36–37.

with respect to the areas within the notice of deposition. This extends not only to facts, but also to subjective beliefs and opinions.¹⁸ If it becomes obvious that the deposition representative designated by the corporation is deficient, the corporation is obligated to provide a substitute.¹⁹

We agree with BRA that Cajun violated rule 30(b)(6) by failing to prepare Grisby with respect to issues that although not within his personal knowledge, were within the corporate knowledge of the organization, such as whether BRA had presented a warranty claim to Cajun. At the very least, Cajun could have designated another witness with personal or corporate knowledge of the questions asked.

If the designated “agent is not knowledgeable about relevant facts, and the principal has failed to designate an available, knowledgeable, and readily identifiable witness, then the appearance is, for all practical purposes, no appearance at all.” *Resolution Trust*, 985 F.2d at 197. In *Resolution Trust* we affirmed sanctions against a party that possessed documents

¹⁸ *Lapenna v. Upjohn Co.*, 110 F.R.D. 15, 25 (E.D. Pa. 1986) (citing 4J. MOORE, J. LUCAS & G. GROTHEER, MOORE’S FEDERAL PRACTICE ¶26.56[3], at 142-43 (2d ed. 1984)); see also *Resolution Trust Corp. v. S. Union*, 985 F.2d 196, 197 (5th Cir. 1993)) (“When a corporation or association designates a person to testify on its behalf, the corporation appears vicariously through that agent.”).

¹⁹ *Marker v. Union Fid. Life Ins. Co.*, 125 F.R.D. 121, 126 (M.D.N.C. 1989) (noting that even where defendant in good faith thought deponent would satisfy the deposition notice, it had a duty to substitute another person once the deficiency of its designation became apparent during the course of the deposition).

that plainly identified a witness as having personal knowledge of the subject of the deposition but did not furnish those documents or designate the witness until after it had designated two other witnesses with no personal knowledge. *Id.*

Although there is no rule requiring that the corporate designee testify “vicariously” at trial, as distinguished from at the rule 30(b)(6) deposition, if the corporation makes the witness available at trial he should not be able to refuse to testify to matters as to which he testified at the deposition on grounds that he had only corporate knowledge of the issues, not personal knowledge. This conclusion rests on the consideration that though Federal Rule of Civil Procedure 32(a)(2) “permits a party to introduce the deposition of an adversary as part of his substantive proof regardless of the adversary’s availability to testify at trial,” *Coughlin v. Capitol Cement Co.*, 571 F.2d 290, 308 (5th Cir. 1978),²⁰ district courts are reluctant to allow the reading into evidence of the rule 30(b)(6) deposition if the witness is available to testify at trial, and such exclusion is usually deemed harmless error.²¹ Thus, if a rule 30(b)(6) witness is made available at trial, he should be allowed to testify as to matters within corporate knowledge to which he testified in deposition.

Also, because, under the rule 30(b)(6)

²⁰ Rule 32(a)(2) provides, in relevant part, that the “deposition of . . . a person designated under Rule 30(b)(6) . . . to testify on behalf of a public or private corporation, . . . which is a party may be used by an adverse party for any purpose.”

²¹ See, e.g., *Jackson v. Chevron Chem. Co.*, 679 F.2d 463, 466 (5th Cir. 1982) (noting that the deposition contained no information that the witness’s “live testimony could not supply”).

framework, Grisby acts as the agent for the corporation, he should be able to present Cajun's subjective beliefs as to whether the products were in breach of warranty, as long as those beliefs are based on the collective knowledge of Cajun personnel. Cajun argues that Grisby had no personal knowledge of this matter under rule 602 and that rule 701 prohibits lay witnesses from testifying as to issues that are not within their personal perception. But Grisby does not testify as to his personal knowledge or perceptions; as explained in *Resolution Trust*, he testifies "vicariously," for the corporation, as to its knowledge and perceptions.

Accordingly, if a certain fact is within the collective knowledge or subjective belief of Cajun, Grisby should be prepared on the issue by Cajun, and allowed to testify as to it, even if it is not within his direct personal knowledge, provided the testimony is otherwise permissible lay testimony. Thus, if it was within the corporate knowledge of Cajun that BRA sent Cajun a warranty claim, Grisby should be allowed to testify as to it even if he did not have direct knowledge of it.

Similarly, Grisby should have been allowed to testify as to whether Cajun's work deviated from the requirements of the contract, because that type of information should be within the corporate knowledge of the organization. In advance of the deposition, Cajun had a duty to prepare Grisby on that issue and to impart to him the information obtained from individuals with personal knowledge within the organization. Of course, in testifying as to matters within Cajun's corporate knowledge or subjective beliefs, Grisby cannot make comments that would otherwise require expert qualifications. To the extent that this question embraces an ultimate issue to be decided by the trier of fact, that testimony would not be inadmis-

sible on that ground under rule 704(b), because the rule is by definition applicable only to criminal cases.

Rather, under rule 704(a), testimony "in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact." Opinions phrased in terms of inadequately explored legal criteria would be inadmissible. Advisory Committee's Note to Rule 704. The Advisory Committee explained that the question "Did T have capacity to make a will?" would be excluded, but the question "Did T have sufficient mental capacity to know the nature and extent of his property and the natural objects of his bounty and to formulate a rational scheme of distribution?" would be allowed.²²

We agree with Cajun, however, that Grisby could not offer any testimony at trial as to whether Ionics had made any misrepresentations about its equipment to BRA, to the extent that information was hearsay not falling within one of the authorized exceptions. But Grisby could testify, for instance, as to what Ionics had told Cajun employees that it had represented to BRA, because that would be an admission of a party opponent.

We agree with Ionics that the record shows that the district court did allow adequate questioning concerning the parties' contracts. But, given that we are remanding, we address Cajun's claim that Grisby could not offer his opinions as the meaning of contractual lan-

²² See also *Torres v. County of Oakland*, 758 F.2d 147, 150 (6th Cir. 1985) ("The problem with testimony containing a legal conclusion is in conveying the witness' unexpressed, and perhaps erroneous, legal standards to the jury.")

guage, for the reason that issues of contract interpretation are for the court only. Where a designated corporate representative is asked to restate or read parts of a contract as a background or foundation for the question whether the corporation performed under the contract, such testimony is permissible, because it does not interpret the contract, but relates to the corporation's performance under the contract (*i.e.* whether a breach occurred), which is an ultimate issue for the jury and to which a witness can testify under rule 704(a), provided he does not phrase his opinion in inadequately explored legal terms.²³

V.

Ionics contends nonetheless that the judgment based on the verdict should be affirmed because the statute of limitations expired on BRA's warranty claims. The district court had denied summary judgment for Ionics on this issue based on a factual dispute about the date of the delivery of the goods, and sent the issue to the jury, which never reached the issue because it found that Ionics did not breach any warranty. Given the disputed factual issue, we cannot affirm the verdict on the limitations ground.

We also reject Cajun's claim that the verdict should be affirmed as to it. The district court's holding that Cajun would be vicariously liable for Ionics's warranty breaches is supported by the contractual language at issue.

The judgment is VACATED, and this matter is REMANDED for a new trial and other appropriate proceedings.

²³ Given that the combined rule 404(b) and rule 407 errors are not harmless and require a remand, we need not decide whether the errors with respect to Grisby's testimony are harmless. And because we remand, we do not discuss BRA's additional claim that the district court erroneously excluded evidence relating to Ionics's failure to disclose certain information.