# STATE OF MICHIGAN

## COURT OF APPEALS

#### MICHAEL D. GREGORY,

Plaintiff-Appellee,

v

CINCINNATI INC., and ADDY-MORAND MACHINERY CO.,

**Defendants-Appellants** 

and

CRUM & FORSTER,

Intervening party.

MICHAEL D. GREGORY,

Plaintiff-Appellee,

v

CINCINNATI, INC, and ADDY-MORAND MACHINERY CO,

Defendants-Appellants.

Before: Cavanagh, P.J., and Doctoroff and Saad, JJ.

PER CURIAM.

In this products liability case, defendants appeal as of right from the final judgment entered following a second jury trial.<sup>1</sup> The jury returned a general verdict against both defendants, finding

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No. 199691 Wayne Circuit Court LC No. 86-627406 CZ plaintiff fifty-one per cent responsible for the accident. On appeal, defendants claim that the trial court erred in failing to grant a directed verdict or judgment notwithstanding the verdict, because each of plaintiff's claims suffer a failure of proof. We agree and reverse.

In a consolidated appeal, defendants challenge the trial court's award of mediation sanctions to plaintiff. Because we reverse the jury's verdict for plaintiff in the second trial, we also vacate the mediation sanction order. The issues raised in the consolidated appeal are therefore moot.

#### FACTS AND PROCEEDINGS

Plaintiff, a journeyman sheet metal worker, was injured in 1986 while operating a press brake owned by his employer, Sheet Metal Industries ("SMI"). The press brake was designed and manufactured in 1964 by Cincinnati, Inc., and distributed by Addy-Morand Machinery Company in the same year. The press brake is an industrial machine used to slowly bend and shape sheet metal. It is operated by use of a foot pedal that engages the clutch when a certain amount of pressure is exerted (here, at least 35 pounds of pressure), causing the top, or "ram," to come down upon the sheet to bend it. The area where the sheet metal is placed in preparation for bending is referred to as the "point of operation." Gregory, 202 Mich App 474, 477; 509 NW2d 809 (1993), aff'd 450 Mich 1; 538 NW2d 325 (1995). The press brake in this case is a general purpose press brake, which can be fitted with different types of dies, in order to make different kinds of bends or manipulations on the metal. Donald Wandling, a consulting engineer who testified as defendants' expert witness, testified that the press brake is not the same as a power press. Wandling explained that unlike a power press, the press brake is often used to shape large pieces of metal which may extend outside of the machine. The operator of the press brake often must manually support the section of the metal piece that extends outside the machine. When the metal is bent by the press brake, the portion of metal outside the machine also moves as the piece changes shape. Power presses involve rapid, repetitive motions; press brakes are much slower and require greater involvement by the operator. Plaintiff did not offer evidence to rebut Wandling's testimony as to the differences between press brakes and power presses.

On the day before the accident, plaintiff had improperly bent some metal sheets. On the day of the accident, plaintiff inserted flattening dies into the press brake so he could remove the improper bends. Plaintiff was operating the machine when he dropped a piece of metal, reached down to retrieve it with his right hand, placed his left hand in the "point of operation," and inadvertently depressed the foot pedal, causing the machine to cycle. Plaintiff's left hand was crushed by the machine.

Plaintiff proceeded against defendants on his claim of negligent design. He contended that the manufacturer knew at the time of manufacture that press brakes pose a hazard of hand injury, and that the manufacturer was therefore obligated to ameliorate the hazard with an appropriate safety device. Plaintiff claimed that when the press brake was sold in 1964 it was well known that the principal hazard of the press brake was injuries to hands. Thus, plaintiff contended that the manufacturer and the seller should have included on the press brake one or more of the following:

(1) a foot pedal guard;

(2) a presence-sensing device such as a "light curtain" (similar to a laser beam or garage-door opener, which causes the machine to stop when the light path is broken);

(3) a barrier guard; or

(4) hand controls or "dual palm buttons."

Following plaintiff's close of proofs, defendants moved for a directed verdict, claiming that plaintiff failed to sufficiently demonstrate the magnitude of risk of hand injuries. The court denied the motion, and proceeded to jury deliberations after defendants presented their proofs. The jury returned a verdict for plaintiff. Defendants then moved for judgment notwithstanding the verdict (JNOV) because of a failure of proof as to each of the four types of safety devices. Specifically, defendants contended that plaintiff failed to demonstrate that the proposed safety devices were both compatible with the press brake's functioning and available in 1964. Again, the trial court denied defendants' motion. The trial court subsequently awarded plaintiff mediation sanctions under MCR 2.403, based on a mediation evaluation made prior to the first trial.

#### No. 198382

#### I

Defendants contend that the trial court erred in denying their motion for JNOV. The standard of review for JNOV requires review of the evidence and all legitimate inferences in the light most favorable to the nonmoving party. Only if the evidence, so viewed, fails to establish a claim as a matter of law, should a motion for JNOV be granted. *Phinney v Perlmutter*, 222 Mich App 513, 524-525; 564 NW2d 532 (1997). A motion for JNOV should be granted only when there was insufficient evidence presented to create an issue for the jury. *Pontiac School District v Miller, Canfield, Paddock & Stone*, 221 Mich App 602, 612; 563 NW2d 693 (1997), lv gtd in part 457 Mich 870 (1998).

Here, there was insufficient evidence for the jury to find that any of the four proposed safety devices was both available in 1964 *and* compatible with all of the machine's intended purposes. Relying upon *Owens v Allis-Chalmers Corp*, 414 Mich 413, 429-430; 326 NW2d 372 (1982), the Court in *Reeves v Cincinnati, Inc*, 176 Mich App 181, 187-188; 439 NW2d 326 (1989) set forth the elements necessary for a plaintiff to establish a prima facie case of design defect:

[A] prima facie case of a design defect premised upon the omission of a safety device requires first a showing of the magnitude of foreseeable risks, including the likelihood of occurrence of the type of accident precipitating the need for the safety device and the severity of injuries sustainable from such an accident. It secondly requires a showing of alternative safety devices and whether those devices would have been effective as a reasonable means of minimizing the foreseeable risk of danger. This latter showing may entail an evaluation of the alternative design in terms of its additional utility as a safety measure and its trade-offs against the costs and effective use of the product.

A plaintiff must therefore show: (1) the magnitude of significant and foreseeable risk; (2) that alternative safety devices exist, (3) that such alternative devices would be effective to minimize the foreseeable risk, and (4) that such alternatives would be practical, given the costs involved and the nature of the intended use of the product. See *Reeves*, *supra*.

Defendants raise specific arguments as to each of the four safety devices identified by plaintiff, and we review each potential device individually.

#### A. Pedal Guard

Plaintiff contends that the press brake was defective when it was manufactured and sold in 1964 because it did not incorporate a foot pedal guard. This argument fails as a matter of law. Owens held that courts "must look to the record to determine what showing was made that any of the proposed [alternative safety designs] would be compatible with the nature of [the] operator's work." Owens, 414 Mich at 430. Defendants presented unrebutted testimony that the pedal guard would make performance of the job impossible. Dennis Cloutier, defendants' expert witness and project safety coordinator for Cincinnati, testified that it would be too awkward for the press brake operator to come in at the side of the pedal under the guard and depress the pedal with his foot while simultaneously supporting the piece of metal to be bent. He explained that "in order to press the pedal, you have to get the major part of your foot on the pedal, on the activating part, not just your toe. If you look at the geometry of the foot, and leg over the foot, you are not going to be able to put the entire portion of the foot over the pedal without your shin coming into contact with the front end of the guard." Defendants' other expert, Wandling, testified that the different tasks performed on the press brake sometimes required the operator to approach the foot pedal from either side, and that a cover would make this impossible. Plaintiff offered no expert testimony or other evidence to rebut Cloutier's or Wandling's testimony; he offered no explanation as to how a foot pedal guard could be incorporated into the machine without interfering with the machine's operations or without limiting the machine's functions.

Furthermore, even if plaintiff had demonstrated that the foot pedal was a feasible safety device, plaintiff would still fail to establish that the absence of a pedal guard was the proximate cause of plaintiff's injury. *Auto Club Insurance Association v General Motors Corporation*, 217 Mich App 594, 604; 552 NW2d 523 (1996). Defendants established that plaintiff's employer had fashioned its own foot pedal guard, but that the employees, including plaintiff, declined to utilize it (bolstering defendants' argument that the pedal cover interfered with the machine's operations). Accordingly, plaintiff failed to demonstrate that his injury was attributable to defendants' failure to include a foot pedal guard.<sup>2</sup>

#### B. Light Curtain

Next, plaintiff contends that defendants negligently designed this press brake in 1964 because they failed to include a presence-sensing device or "light curtain" which, when the light beam is broken,

would automatically shut the machine off. JNOV should have been granted on this claim because plaintiff's proofs failed in two respects.

First, plaintiff failed to establish that light curtains were available as a means of guarding press brakes in 1964. It is clear that a plaintiff bears the burden of proving the availability of a proposed safety device at the time of manufacture. See *Owens*, 414 Mich at 427, n 4; *Reeves*, 176 Mich App at 187-188. Here, plaintiff's expert's testimony established only that a German company, Sic Optive, had developed and manufactured a light curtain before 1964. There was no testimony that a light curtain sensor was, in fact, *available* for use by American manufacturers of press brakes in 1964, and no rebuttal of defendants' evidence that the electronic wiring of the Sic Optive system failed to meet American standards in 1964. On this record, plaintiff has failed to show that his proferred "light curtain sensor" was "available."

Furthermore, plaintiff failed to meet his burden of showing that a press brake with a light curtain would function adequately to perform the jobs to be completed by plaintiff's employer. We must consider whether plaintiff established that the proposed safety feature was compatible with the operator's work. *Owens*, 414 Mich at 430. The only evidence presented here by either party on this issue was the testimony of plaintiff's supervisor, who testified that use of such a light curtain sensor would be incompatible with the operations of plaintiff's employer. In light of this unrebutted testimony, the trial court should have granted JNOV on this claim.

#### C. Barrier Guards

Plaintiff also claims that defendants were negligent by not designing the press brake with some type of barrier guard. This claim fails for the same reasons that the light curtain sensor claim fails; plaintiff has failed to present evidence to controvert plaintiff's supervisor's testimony that such guards would make operation of the brake presses "impossible" – an operator could not use a machine so equipped to accomplish all the tasks that the employer required. See also *Bullock v Gulf & Western*, 128 Mich App 316, 322; 340 NW2d 294 (1983);<sup>3</sup> Cf. *Reeves*, 176 Mich App at 189-190. Defendants' expert, Wandling, also testified that a barrier guard would create an additional hazard to the operator because it would interfere with the movement of the piece of metal outside the machine when the metal became bent.

#### D. Dual Palm Buttons

Plaintiff also contends that the press brake could have been designed with dual palm buttons which would have prevented the machine from engaging unless both of the operator's hands were safely outside of the machine. Plaintiff's expert testified that in 1964, it was possible to build a press brake which required the operator to use two outside hand controls to lower the ram far enough so that there was no longer a danger that the operator would accidentally put his hand in the point of operation. Once the ram was low enough, the operator could use his hands to support the metal and engage the foot pedal. However, defendants rebutted this evidence with testimony that dual palm buttons could not be incorporated into a *general purpose* press brake, although they might work on a *special purpose* 

construction brake. Furthermore, if the machine had two palm buttons, it would not be possible to control the speed or to "feather" the piece of metal. Plaintiff's witnesses never addressed these issues.

Even if a two-button model could have been integrated into SMI's operations, plaintiff's proofs would still fail because of evidence that Cincinnati offered a two-button model for sale in 1964, which SMI declined to purchase. In *Owens, supra*, the Michigan Supreme Court recognized the principle that a manufacturer which offers a particular safety feature will not be held liable for design defect where a knowledgeable purchaser opted to buy the product without that feature.<sup>4</sup> The plaintiff in *Owens* claimed that a forklift was defective because it did not include a cage enclosure to protect the driver in case of a rollover. The Court concluded that the claim was meritless as a matter of law:

Significantly, the defendant did offer the cage enclosure, which was one of the suggested restraints, as an option. The question then becomes whether such a cage enclosure should have been installed as standard equipment. Although plaintiff's expert acknowledged that some drivers are frequently in and out of their vehicles, there was no testimony concerning the effects of a cage upon the driver's ability to perform his or her work. There also was no factual testimony concerning the safety of an operator in a cage enclosure in a rollover or in any foreseeable accidents or emergencies other than rollovers. *In short, we find no support in the record for the conclusion that the manufacturer, as opposed to the employer, would be in a better position to conclude that the cage enclosure should be installed as standard equipment.* [Owens, 431-432.]

Similarly, plaintiff here has failed to demonstrate that the dual palm buttons should have been installed as standard equipment. There was no factual testimony that this design would be fully compatible with SMI's operations. Accordingly, we cannot conclude that defendants, as opposed to SMI, was in a better position to conclude that the dual-palm buttons should have been installed on every press brake Cincinnati manufactured.

In sum, plaintiff failed to adduce the requisite proofs with respect to each of the proposed safety devices. Plaintiff therefore failed to establish all the elements of a design defect claim, and the trial court erroneously denied defendants' motion for JNOV.

#### Π

Furthermore, the trial court should have granted defendants' motion for a directed verdict on all four claims of negligent design, because plaintiff failed to present evidence of the magnitude of the risk of similar injuries occurring with use of the press brake prior to 1964. *Owens, supra* at 429-430; *Petto v The Raymond Corp*, 171 Mich App 688, 693; 431 NW2d 44 (1988). Plaintiff did present some evidence of injuries from power *presses*, rather than power *brakes*. However, this evidence is not satisfactory because power presses and power brakes function very differently, especially with respect to the nature of the operator's interface with the machine. Accordingly, we do not believe that the evidence presented with respect to power presses was relevant to the magnitude of risk of injury from power brakes.

With respect to plaintiff's evidence on press brakes, namely documents authored by governmental and industry organizations prior to 1964, these documents merely stated that the press brake was a very dangerous machine and that the most common accident to press brake operators was hand and finger injuries. In our view, evidence showing merely that there *was* a risk of harm is insufficient to meet the plaintiff's burden to show *what* the risk of harm was (e.g., how frequently such incidents occurred, the extent to which the risk can be mitigated by adequate training).

In light of this disposition, we need not address the remaining issues.

### No. 199691

In the consolidated appeal, defendants raise issues relating to the award of mediation sanctions. Because we have reversed judgment for plaintiff, we also vacate the mediation award. All issues raised in the consolidated appeal are therefore moot.

Reversed and remanded for judgment consistent with this opinion. We do not retain jurisdiction.

/s/ Martin M. Doctoroff /s/ Henry William Saad

<sup>1</sup> This matter returns to our Court after remand. *Gregory v Cincinnati Inc*, 202 Mich App 474; 509 NW2d 809 (1993), aff'd 450 Mich 1, 6, 36; 538 NW2d 325 (1995).

<sup>2</sup> Plaintiff argues in his brief that SMI's pedal guard was not adequate, but he presented no evidence in support of this argument at trial.

<sup>3</sup> In *Bullock v Gulf & Western*, 128 Mich App 316, 322; 340 NW2d 294 (1983), the plaintiff was injured when the ram of his punch press came down on his hand while he was changing a broken punch. He claimed, in part, that a guard would have prevented the accident. The trial court granted a directed verdict for the defendant. We found the guard proffered by the plaintiff was available and feasible when the power press was manufactured, but:

[B]ecause of the limitations imposed by the guarding devices, such a guard placed on the punch press before it is assembled into the entire system would turn what was intended as a multi-purpose punch press into a single-purpose press. The size, shape, and type of guard would have to be selected with the ultimate use of the metal forming system in mind. We agree that this would be an unreasonable burden to impose upon a manufacturer who has been "hired" to supply a multi-purpose press.

Defendants make a similar argument here, and on the record presented here, we find it persuasive.

<sup>4</sup> See 63A Am Jur 2d, Products Liability, §995, p 158, also *Scallon v Duriron Co*, 11 F3d 1249, 1253 (CA 5, 1994), and *Linegar v Armour of America, Inc*, 909 F2d 1150, 1154 (CA 8, 1990).