

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

EATON CORPORATION, :
 :
 Plaintiff, :
 :
 v. : C.A. No. 97-421-JJF
 :
 ROCKWELL INTERNATIONAL :
 CORPORATION and MERITOR, :
 AUTOMATIVE, INC., :
 :
 Defendants. :

Donald E. Reid, Esquire of MORRIS, NICHOLS, ARSHT & TUNNELL,
Wilmington, Delaware.
Of Counsel: Michael H. King, Esquire, Keith P. Schoeneberger,
Esquire, Kurt H. Feuer, Esquire, and Peter N. Witty, Esquire of
ROSS & HARDIES, Chicago, Illinois; J. Frank Osha, Esquire, and
William H. Mandir, Esquire of SUGHRUE, MION, ZINN, MACPEAK &
SEAS, Washington D.C.
Attorneys for Plaintiff.

Richard L. Horwitz, Esquire, and Michael S. McGinniss, Esquire of
POTTER, ANDERSON & CORROON, Wilmington, Delaware.
Of Counsel: Richard W. McLaren, Jr., Esquire, Jerold B. Schnayer,
Esquire, Eric C. Cohen, Esquire, and Walter J. Kawula, Jr.,
Esquire of WELSH & KATZ, LTD., Chicago, Illinois.
Attorneys for Defendants.

MEMORANDUM OPINION

October 10, 2001
Wilmington, Delaware

FARNAN, District Judge.

Defendants, Rockwell International Corporation and Meritor Automotive, Inc. (collectively "Rockwell") filed a Renewed Motion For Judgment As A Matter Of Law ("JMOL"), Or In The Alternative, For A New Trial Or Remittitur (D.I. 312). Following a jury verdict in favor of the Plaintiff, Eaton Corporation ("Eaton"), Rockwell filed the instant Motion seeking relief pursuant to Rule 50(b) and Rule 59 of the Federal Rules of Civil Procedure.

The Court has previously denied Rockwell's Renewed Motion For Judgment As A Matter of Law (D.I. 312). (See D.I. 476). Accordingly, this Memorandum Opinion will set forth the Court's reasons for denying that Motion. Additionally, for the reasons set forth below, the Court will also deny Rockwell's Alternative Motion For A New Trial Or Remittitur (D.I. 312).

BACKGROUND

I. Factual Background

A. Parties

This patent infringement action involves the technology of heavy-duty truck transmissions. (D.I. 1). Eaton is a manufacturer of transmissions of heavy-duty trucks, or "eighteen wheelers." (D.I. 3 at 2). Since the 1950s, Eaton has operated a Research and Development Center for the design and development of new products for truck components. (D.I. 3 at 2). Eaton is the owner by assignment of United States Patent No. 4,850,236 ("the

'236 Patent"), which was issued on July 25, 1989, for an invention entitled "Vehicle Drive Line Shift Control System and Method." (PTX 1; D.I. 3). Eaton is currently the sole owner of all rights, titles, and interests in the '236 Patent. (PTX 1; D.I. 3).

Eugene R. Braun ("Braun") is the named inventor on the '236 Patent. (PTX 1). After thirty-three years of employment with Eaton, Braun retired on July 1, 1996.¹ Between 1975 and his retirement, Braun supervised a group of Eaton engineers involved in the design of new products for truck components. Throughout the course of his career, Braun obtained approximately forty-seven patents. The ideas behind the '236 Patent were allegedly developed by Braun in 1977 and perfected about the time the patent application was submitted to the United States Patent and Trademark Office ("PTO") on November 20, 1987. (PTX 1; PTX 35).

Howard D. Gordon ("Gordon") is a patent attorney admitted to practice before the PTO since 1969 and employed as a member of Eaton's law department. Gordon prosecuted the patent application for the '236 Patent before the PTO.

Rockwell, has been a manufacturer of manual transmissions since 1989. Rockwell manufactures and sells the Engine Synchro Shift transmission system ("the ESS system"). (D.I. 3 at 16).

¹Braun passed away in February 1999 after completion of the jury trial in this case, but prior to the commencement of the bench trial on the inequitable conduct issues.

Based on a survey of eighteen wheeler drivers compiled by Rockwell, the ESS system was developed in 1993 and 1994.² According to Rockwell, this system makes shifting a manual transmission easier because it provides automatic range shifts and automatically synchronizes engine RPMs (revolutions per minute) to road speed between shifts, thereby eliminating the need for the driver to manipulate the clutch pedal between shifts. (D.I. 4, Ex. E). The ESS system, however, retains the use of a shift lever. (D.I. 4, Ex. E). In 1997, Rockwell sold its automotive division forming a new company called Meritor Automotive, Inc.³

B. The Patent

The '236 Patent claims a "vehicular transmission shift control system" for use in a heavy-duty truck. (PTX 1). Generally, the transmission in a heavy-duty truck, or "eighteen wheeler" has ten or more gears, requiring considerable skill by the driver in order to manually shift the gears. (D.I. 3 at 2). The '236 Patent is directed at reducing some of the complexities of manual shifting by creating an automated driveline system that permits clutchless shifting. (D.I. 3 at 2).

² The ESS system was a collaborative effort between Rockwell and Detroit Diesel Corporation, a manufacturer of engines for large trucks.

³ In this opinion, the Court will refer to both companies as "Rockwell."

In order to shift gears in a heavy-duty truck with a manual transmission, the transmission must first be shifted from the present gear into neutral, and then from neutral into the desired new gear. (D.I. 3 at 3). To do this, the master clutch is manually disengaged by depressing the clutch pedal, which disconnects the engine from the transmission. (D.I. 3 at 3). The driver then manually moves the shift lever out of the present gear, and releases the clutch pedal to reconnect the master clutch. (D.I. 3 at 4). At the same time, the driver depresses the fuel pedal causing the engine to rotate at a speed that will allow the driver, using the shift lever, to smoothly shift into the target gear. (D.I. 3 at 4).

The method taught by Claims 14 through 19 of the '236 Patent renders these steps unnecessary by permitting the driver to shift gears without manipulating the clutch or fuel pedal. (D.I. 3 at 4). According to Claim 14 of the '236 Patent, the supply of fuel to the engine is controlled automatically, which varies the truck engine's speed above and below the speed that allows the transmission to be shifted out of gear and into neutral with minimal force (otherwise known as "zero torque"). (D.I. 3 at 4;PTX 1). This method of varying the engine speed by varying the fuel supply is known as "dithering."⁴ (D.I. 3 at 4). Dithering

⁴ Dithering is sometimes referred to as "breaking torque" or "reversing torque."

in the vicinity of zero torque causes a reversal of torque in the jaw clutch elements by alternating repeatedly from a condition where the engine is driving the wheels to a condition where the wheels are driving the engine (i.e. the vehicle is "coasting"). (D.I. 3 at 6-7). Coasting permits easy separation of the jaw clutch teeth, so that the vehicle is in neutral. (D.I. 3 at 4, 7). Once the vehicle is in neutral, the '236 Patent also teaches a method to automatically control the amount of fuel to the engine, causing the jaw clutch teeth to rotate at substantially the same speed ("synchronous speed") as those of the target gear. (D.I. 3 at 14). This latter method, described in Claim 15, permits the connection of the jaw clutch teeth, allowing the shift from neutral to the target gear without the need to manually initiate the shift. Claims 15 through 19 are dependent on Claim 14. (D.I. 3 at 9, 14;PTX 1).

C. The Alleged Prior Art

Throughout the course of the trial, Rockwell introduced numerous documents in an attempt to establish that the '236 Patent was invalid in light of the prior art. For the purposes of this Memorandum Opinion, the most notable evidence in this regard is that which surrounds the 1986 Gelco/Dana Top 4 Truck, the 1987 Cummins Top 2 Trucks and the Vukovich 4,493,228 Patent ("Vukovich '228 Patent").

The 1986 Gelco/Dana Top 4 Truck ("the Top 4 System") was a

tractor-trailer truck owned by Gelco Leasing Company ("Gelco") equipped with a diesel engine from Cummins Engine Company ("Cummins"), a partially automated transmission from the Spicer Division of Dana Corporation, and an automatic fueler. The Top 4 System used automatic "fuel blips," not a clutch actuator, to enable automatic shifting in the Top 4 gears. (Tr. 786-87, 833-34). In April, 1986, this truck was involved in a 3,000 mile round trip Fuel Economy Run between St. Louis, Missouri and Kingman, Arizona that was organized by Gelco. In operation, the truck driver manually shifted the 1986 Gelco/Dana Top 4 through the lower gears.

After successful completion of the April, 1986 Gelco 3000 mile road test, two 1987 Cummins Top 2 Trucks ("the Top 2 System") were created by Cummins pursuant to an arrangement with Gelco. The first 1987 Cummins Top 2 Truck had a partially automated transmission from the Spicer Division of Dana Corporation, a Cummins diesel engine and automatic fuel controls programmed by Dean Anderson, a engineer employed by Cummins. The second 1987 Cummins Top 2 truck had a partially automated transmission from the Fuller Division of Eaton, a Cummins diesel engine and automatic fuel controls also programmed by Dean Anderson. Neither of these Top 2 trucks had a clutch actuator. Rather, they both used multiple "fuel blips" to ensure torque reversals and gear disengagement. (DTX 254, p. 3; DTX 437, DTX

443; DTX 444; DTX 445, DTX446). In September 1987, both of these Top 2 trucks were involved in a 3,000 mile round trip Fuel Economy Run between St. Louis, Missouri and Kingman, Arizona, which was again conducted by Gelco. After this test was completed, Gelco issued the Tech 2000 road test press kit, which primarily reported the fuel economy results of this test. (DTX 482).

As for the Vukovich '228 Patent, the Vukovich '228 Patent involves a throttle control system for an automatic shift countershaft transmission. (See DTX 525). For the purposes of this Memorandum Opinion, it is not necessary to set forth the details of the Vukovich '228 Patent. Rather, based on the parties' arguments, the important aspect of this patent is its issue date, January 15, 1985. (DTX 525).

II. Procedural History

On July 7, 1997, Eaton filed a Complaint against Rockwell, alleging, among other things, that Rockwell willfully infringed Claims 14 through 19 of the '236 Patent by manufacturing and selling the ESS system. (D.I. 1). On September 3, 1997, Rockwell filed an Answer to the Complaint and a Counterclaim, seeking a declaratory judgment of invalidity and non-infringement of the '236 Patent. (D.I. 28). The Court conducted a jury trial on the issues of patent validity, infringement, and willful infringement. (D.I. 277-83). At the close of the evidence,

Rockwell moved for Judgment As A Matter Of Law pursuant to Rule 50 of the Federal Rules of Civil Procedure on the issues of validity, infringement, and willful infringement. (D.I. 312 at 1). The Court reserved judgment on all JMOL motions. (D.I. 312 at 1).

On July 1, 1998, the jury returned a verdict in favor of Eaton on the issues of validity, infringement, and willful infringement. (Tr. 1790-92). Additionally, the jury awarded damages in favor of Eaton in the amount of \$1,242,261.00, applying a royalty rate of 13%. (Tr. 1793). Following the jury verdict and within the applicable time specified in Rule 50(b) of the Federal Rules of Civil Procedure, Rockwell filed the instant Motion renewing their application for Judgment As A Matter Of Law on validity, infringement, and willful infringement, and in the alternative, moving for a New Trial or Remittitur. (D.I. 312). The Court will address each of Rockwell's arguments.

STANDARD OF REVIEW

I. Standard For Judgment As A Matter Of Law

To prevail on a Rule 50(b) renewed motion for judgment as a matter of law following a jury verdict, the movant "must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they [are], that the legal conclusions implied [by] the jury's verdict cannot in law be supported by those findings." Lifescan, Inc. v. Home

Diagnositics, Inc., 103 F. Supp. 2d 345, 350 (D. Del. 2000),
aff'd, 2001 WL 345439 (Fed. Cir. Apr. 6, 2001). The Court must
draw all logical inferences from the evidence in the light most
favorable to the non-moving party. Id. In addition, the Court
must resolve all conflicts in the evidence in favor of the non-
moving party, and must refrain from substituting its own
interpretation of the evidence in place of the jury's
interpretation. Id. To this effect, the court must assess
whether or not sufficient evidence exists in the record to
"reasonably support[] the jury's verdict." Id.

II. Standard For New Trial

A court may grant a Rule 59 motion for a new trial if: (1)
the jury's verdict is against the great weight of the evidence,
(2) new evidence has been discovered that would likely alter the
outcome of the trial, (3) improper conduct by an attorney or the
court likely influenced the jury's verdict, or (4) the jury's
verdict was facially inconsistent. Id. at 351. When deciding
whether a new trial is warranted because the verdict is against
the great weight of the evidence, the court need not view the
evidence in the light most favorable to the verdict winner as it
must when considering a Rule 50(b) motion. Rather, the court
should only grant a Rule 59 motion if the jury's verdict shocks
the conscience of the court. Id. The decision to grant a new
trial is within the sound discretion of the district court. Id.

It is also within the district court's discretion to reduce a damages award if the court finds the award to be clearly excessive. Spence v. Board of Educ. of Christina Sch. Dist., 806 F.2d 1198, 1201 (3d Cir. 1986).

DISCUSSION

I. Whether Rockwell Is Entitled To Judgment As A Matter Of Law

A. Whether Claims 14 through 19 Of The '236 Patent Are Invalid As A Matter Of Law

By statute, patents are presumed to be valid. 35 U.S.C. § 282. Accordingly, a party who seeks to challenge a patent's validity has the burden to establish by clear and convincing evidence that the patent is invalid. See Transco Prods. Inc. v. Performance Contracting, Inc., 38 F.3d 551, 560 (Fed Cir. 1994).

By its Motion, Rockwell raises five arguments that the '236 Patent is invalid. Specifically, Rockwell contends that the '236 Patent is invalid because (1) it does not comply with the best mode requirement; (2) it does not provide an enabling disclosure; (3) it was derived from another inventor; (4) the prior art, including the 1986 Gelco/Dana Top 4 Truck, the 1987 Cummins Top 2 Trucks, and the Vukovich '228 Patent, anticipates the '236 Patent; and (5) it is obvious in view of the prior art.

1. Whether Claims 14 through 19 Of The '236 Patent Are Invalid For Failure To Comply With The Best Mode Requirement As A Matter Of Law

By its Motion, Rockwell contends that it is entitled to a

judgment of invalidity regarding the '236 Patent as a matter of law, because the '236 Patent fails to comply with the best mode requirement. (D.I. 321 at 39). Specifically, Rockwell contends that the testimony of the '236 Patent inventor clearly establishes that Claims 14 through 19 do not comply with the best mode requirement. (D.I. 321 at 39).

The patent statute requires an inventor to "set forth the best mode contemplated by the inventor of carrying out his invention." 35 U.S.C. § 112, ¶ 1. Two factual inquiries are required in order to determine whether a patent is invalid for failure to comply with the best mode requirement. Nobelpharma AB v. Implant Inovations, Inc., 141 F.3d 1059 (Fed Cir. 1998), cert. denied, 525 U.S. 876 (1998). First, the fact-finder must determine whether the applicant, at the time the application was filed, had a best mode for practicing the invention. Id. at 1064. This step is a subjective inquiry. Id. Second, assuming that the applicant did have a best mode for practicing the invention, the fact-finder must determine whether that best mode was disclosed in sufficient detail in the patent to allow one of ordinary skill in the art to practice it without undue experimentation. Id. This step is an objective inquiry. Id. In making these determinations, the fact-finder may rely exclusively upon the inventor's testimony. Id. at 1059.

Relying on the Court of Appeals for the Federal Circuit's

decision in Nobelpharma, Rockwell contends that the testimony of the patent's inventor, Braun, establishes that the '236 Patent does not disclose the best mode for the invention claimed in Claims 14 through 19. (D.I. 321 at 5-8). Specifically, Rockwell contends that Braun knew on or before the filing date of the '236 Patent that slowly "increasing" and "decreasing" the supply of fuel would make the invention operate in a reasonable fashion. (D.I. 321 at 5). Additionally, Rockwell contends that Braun knew this technique of slowly increasing and decreasing fuel was "important" and "has to be done properly," otherwise the gear will not disengage. (D.I. 321 at 5-6). Despite the importance of these issues, Rockwell contends that the '236 Patent is completely silent as to the rate at which to perform the claimed step of "increasing" and "decreasing" the supply of fuel to the engine. (D.I. 321 at 7).

In response, Eaton contends that Rockwell offered no evidence establishing its claim that Braun was aware of any better mode of practicing the '236 Patent at the time he filed his application. (D.I. 325 at 3). Additionally, Eaton contends that Rockwell cannot point to any evidence which would illustrate what "slowly" meant to Braun in the context of his invention. (D.I. 325 at 4). Further, Eaton contends that there is no evidence to even remotely suggest that Braun did not disclose the best mode for practicing his invention in sufficient detail to

allow a skilled artisan to practice it without undue experimentation. (D.I. 325 at 5).

After considering the parties' arguments, the Court concludes that there is evidence to support the jury's verdict of validity on the best mode issue. Even assuming the truth of Rockwell's assertion that the programs in the controller and the technique of slowly increasing and decreasing fuel were both known and considered by Braun to be part of the best mode for practicing his invention, the record contains no evidence that Braun's failure to disclose these modes would cause a skilled artisan to undertake undue experimentation in order to practice the best mode of Braun's invention. In fact, Braun's testimony with regard to the technique of increasing and decreasing fuel illustrates that the proper rate was discovered by mere testing, not undue testing, and that neither Braun nor anyone else ever determined a value to define slowly:

Q: How did you determine that was the case, that it needed to be done slowly?

A: I assume we tested it.

Q: Were you involved in those test to some degree?

A: Yes.

Q: Did you come up with a value that seemed to be appropriate?

A: No. We set a speed of change that worked.

(Tr. 958-61). Rockwell contends that this case is analogous to

Nobelpharma, and therefore, the Court should grant its Motion For Judgment As A Matter Of Law on the basis of Braun's testimony alone. In the Court's view, Nobelpharma is distinguishable from this case.

In Nobelpharma, the co-inventor admitted that "there were some minor details that were not included [in the patent] and which proved to be quite important" and that persons skilled in the art would be "lucky" to successfully practice the invention without the details omitted from the patent. Id. at 1065. The Federal Circuit held that the co-inventor's admissions alone were sufficient to support the grant of judgment as a matter of law that the patent was invalid. Id. Unlike Nobelpharma, in this case, neither Braun nor anyone else testified that a skilled artisan would be "lucky" to successfully practice the best mode of the invention without disclosing the programs in the controller and the technique of slowly increasing and decreasing fuel. See Nobelpharma at 1065. Further, Rockwell presented no other evidence, testimonial or otherwise, to establish that one skilled in the art could not successfully practice the best mode of the invention without undue experimentation. Because Rockwell failed to offer clear and convincing evidence to establish that the '236 Patent fails to comply with the best mode requirement, the Court cannot conclude that the jury verdict was erroneous. Accordingly, the Court will deny Rockwell's Motion For Judgment

As A Matter Of Law on the issue of validity in the context of the best mode requirement.

2. Whether Claims 14 through 19 Of The '236 Patent Are Invalid For Failure To Comply With The Enablement Requirement As A Matter Of Law

By its Motion, Rockwell contends that it is entitled to a judgment as a matter of law because the '236 Patent fails to comply with the enablement requirement. (D.I. 321 at 42). Specifically, Rockwell contends that the evidence at trial clearly establishes that Claims 14 through 19 of the '236 Patent, as construed by this Court, were not supported by an enabling disclosure. (D.I. 321 at 42).

An applicant for a patent is required to provide a "specification" that "contain[s] a written description of the invention, and the manner and process of making and using it, in such full, clear, and precise terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same." 35 U.S.C. § 112, ¶ 1. A narrow enabling description within the patent specification may limit the scope of the valid claims. Gentry Gallery, Inc. v. Berklinc Corp., 134 F. 3d 1473, 1479 (Fed. Cir. 1998). However, "it is a truism that a claim need not be limited to a preferred embodiment." Id.

Rockwell contends that the specification of the '236 Patent clearly identifies automatic shifting as one of the essential

elements of the invention, and therefore, in construing the claims the Court should have limited Claims 14 through 19 to automatic shifting. (D.I. 321 at 43). Because the Court did not limit the claims to automatic shifting and concluded that the claims refer to both manual and automatic shifting, Rockwell contends that Claims 14 through 19 must be invalid. (D.I. 321 at 42). Specifically, Rockwell contends that the claim is invalid as construed by the Court, because the specification does not contain an enabling disclosure for a non-automatic, driver initiated shift method. (D.I. 321 at 42). In response, Eaton contends that Rockwell presented no evidence to establish that the '236 Patent failed to meet the enablement requirement. (D.I. 325 at 7).

After reviewing the record on this issue, the Court cannot conclude that the jury's verdict was erroneous. The record does not contain any evidence establishing that the patent's specification lacked sufficient disclosure for one skilled in the art to be able to practice the method taught by Claims 14 through 19 in a manual transmission system, as opposed to an automatic transmission system. Indeed, in making its argument on this issue, Rockwell has been unable to identify any such evidence in the record in support of its contentions. (See D.I. 321 at 42-43; D.I. 326 at 2-3). Because Rockwell failed to provide sufficient evidence to meet its burden of proof on validity, the

Court cannot conclude that the jury's verdict of validity was erroneous. Accordingly, the Court will deny Rockwell's Motion For Judgment As A Matter Of Law on the issue of validity in the context of the enabling requirement.

3. Whether Claims 14 through 19 Of The '236 Patent Are Invalid For Violation Of the Derivation Rule As A Matter Of Law

By its Motion, Rockwell contends that it is entitled to judgment as a matter of law on the issue of validity, because the evidence at trial was sufficient to establish that the '236 Patent was derived from Cummins' employees. (D.I. 321 at 43). Specifically, Rockwell contends that Cummins' employee, Anderson, was the first to conceive the complete invention and that Cummins communicated this conception to Eaton, such that Braun derived his invention from another. (D.I. 321 at 43).

A person is not entitled to a patent if "he did not himself invent the subject matter sought to be patented." 35 U.S.C. § 120(f). Accordingly, a patent will be held invalid if it can be shown that an inventor derived the idea for his or her patent from another. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1576 (Fed. Cir. 1997). In order establish derivation, the party asserting invalidity must prove by clear and convincing evidence both prior conception of the invention by another and communication of the conception to the patentee. Id. Additionally, the communication of the complete conception must

be sufficient to enable a person of ordinary skill in the art to practice the invention. Id. at 1578.

In this case, Braun testified that he conceived the idea for Claims 14 through 19 of the '236 Patent in 1977 and that he recorded this conception by way of a diagram which he later attached to one of Eaton's forms for original disclosure on February 28, 1977. (Tr. 366-67; PTX 41). Rockwell contends that this diagram and form are insufficient to establish that Braun had a complete conception of Claims 14 through 19 in 1977, because Braun's 1977 diagram does not disclose a number of steps claimed in Claims 14 through 19, including but not limited to the first and second positive clutch elements, the step of sensing neutral, or the step of repeating the fuel blip to cause additional torque reversals if neutral is not sensed. (D.I. 321 at 45-46). Accordingly to Rockwell, the complete invention was first conceived by Cummins' engineer, Dean Anderson, because Anderson completed a flow chart entitled "Upshift Routine-Top 2 Autoshift" as early as December 1, 1986, which illustrated a complete conception of the claims at issue. (D.I. 321 at 44; DTX 437 at CUM0000194).

After reviewing the evidence as it relates to this issue, the Court cannot conclude that Cummins communicated Anderson's conception of the invention to Eaton prior to the filing date of the '236 Patent, such that Braun derived his invention from

Cummins' Anderson. Assuming that Anderson's December 1986 flow chart entitled "Upshift Routine-Top 2 Autoshift" was a complete conception of the claims at issue, in the Court's view, Rockwell failed to present any evidence establishing that this conception was communicated to Eaton or Braun, much less communicated in any manner sufficient for one skilled in the art to practice the invention.

In support of its argument, Rockwell directs the Court to a number of Eaton documents and highlights the fact that Braun attended a series of meetings with Cummins' engineers, the first of which occurred on August 4, 1987. Specifically, Rockwell refers to one of Eaton's internal correspondence memorandums, which reflects that a meeting between Braun and Anderson occurred on October 26, 1987. In pertinent part, this correspondence provides:

It was at this meeting that Cummins revealed that they were not using clutch actuator or engine speed pickup and had eliminated the 7th position and neutral position sensors. They said they were reversing torque with no perceptible speed change. Typically only fueling one or two cylinders. The process was time-based. If not done the first time, the reversal process was done again for a longer time. In the Gelco test, maybe 2% of the shifts required the second reversal.

(D.I. 321 at 48; DTX 91 at 3). In addition, Rockwell refers to a portion of another Eaton memorandum, dated November 12, 1987, which states:

77-RES-124

Reviewed with E. Braun. This old disclosure includes

"throttle jiggle" to assure/force gear disengage. Cummins using this for their "Top 2/Top 4" controls. We may want to use. Eliminate need to disengage master clutch to make a splitter shaft.

(D.I. 321 at 49; DTX 254 at 3).

After reviewing these documents, the Court cannot conclude that they are sufficient to establish as a matter of law that Cummins communicated its conception to Braun prior to the filing date of the '236 Patent. First, as the cited portions of the documents indicate, the communications lack sufficient detail to enable a person of skill in the art to practice the claimed invention. Indeed, even Cummins' own employee, Anderson, acknowledged the lack of detail in the Eaton documents. Reviewing an Eaton document, Anderson stated "I can't disagree that it [Cummins' Top 2 automatic system shift sequence] wasn't used because it's very generic. It's not detailed in any sense here of the process." (Tr. 1502; DTX 333). Further, Anderson acknowledged that "we [Cummins] were very, not very open about necessarily a lot of the details" regarding the shift routine that Cummins was using for its Top 2 system. (Tr. 1501). In addition to the testimony of Anderson, Braun testified that he had no knowledge of how the Cummins Top 2 system operated in 1987. (Tr. 387). Moreover, the memorandum on which Rockwell relies to establish that Braun and Anderson had a meeting on October 26, 1987 was actually written on November 7, 1986, more than a year after Braun had filed for the '236 Patent. Thus,

while Rockwell's evidence may indicate that meetings were held between Braun and Anderson, the fact that meetings were held is insufficient to establish that Anderson communicated his ideas to Braun in sufficient detail such that Braun could have derived his invention from Anderson. Because Rockwell failed to present clear and convincing evidence to establish that Claims 14 through 19 of the '236 Patent were derived from Cummins, the Court cannot conclude that the jury's verdict was erroneous. Accordingly, the Court will deny, Rockwell's Motion For Judgment As A Matter Of Law on the issue of validity in the context of derivation.

4. Whether Claims 14 through 19 Of The '236 Patent Are Invalid As Anticipated As A Matter Of Law

By its Motion, Rockwell contends that the '236 Patent is invalid as anticipated by three prior art references: (1) the 1987 Cummins Top 2 Trucks; (2) the 1986 Gelco-Dana Top 4 Truck; and (3) the Vukovich '228 Patent. The parties do not dispute that the Vukovich '228 Patent is properly considered prior art; however, they disagree as to whether the 1987 Cummins Top 2 Trucks and the 1986 Gelco/Dana Top 4 Truck are relevant prior art. However, even if these references are considered prior art, the parties also disagree as to whether these references render the '236 Patent invalid.

A patent claim is invalid if it is anticipated by a prior art reference. Smith v. ACME General Contractors, 614 F.2d 1086 (C.A. Ohio 1980). Anticipation only occurs when "all of the

elements and limitations of a claim are found in a single prior art reference," which could include a patent, publication, device or method. Scripps Clinic & Research Foundation v. Genentech, Inc., 927 F.2d 1565, 1576 (Fed. Cir. 1991). A number of ways in which a reference can constitute prior art are set forth in 35 U.S.C. § 102.

a. Whether The 1987 Cummins Top 2 Trucks Anticipate Claims 14 through 19 Of The '236 Patent As A Matter Of Law

The threshold question presented by the parties concerning the 1987 Cummins Top 2 Trucks is whether this reference may properly be considered prior art. By its Motion, Rockwell contends that the Top 2 Trucks may be considered relevant prior art under both 35 U.S.C. § 102(g) and 35 U.S.C. § 102(a). The Court will address each of Rockwell's arguments.

(1) Whether The 1987 Cummins Top 2 Trucks Are Prior Art Under 35 U.S.C. § 102(g) As A Matter Of Law

In pertinent part, 35 U.S.C. § 102 (g) provides:

A person shall be entitled to a patent unless . . .

(g) before the applicants invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

35 U.S.C. § 102 (g). In order to demonstrate that "the invention

was made in this country by another," there must be proof of an actual reduction to practice of the invention. See id. In a complex mechanical device, actual reduction to practice occurs when "the device was subject to a test under actual working conditions which demonstrated not that the device might work, but that it actually did work." Newkirk v. Lulejian, 825 F.2d 1581 (Fed. Cir. 1987) (citing Chandler v. Mock, 150 F. 2d 563, 565 (CCPA 1945)). Accordingly, in order to establish an actual reduction to practice, proof of more than theoretical capability is required. Id. Additionally, under this section, priority of the invention goes to the person who is the first to reduce the invention to practice, unless another party can establish that he or she was the first to conceive the invention and that he or she exercised reasonable diligence in reducing the invention to practice. Price v. Symsek, 988 F.2d 1187 (C.A. Fed. 1993).

In this case, the parties' dispute centers on the question of priority of the invention. Rockwell contends that the claimed invention was first reduced to practice before September 1987 by Cummins in their 1987 Top 2 Trucks. (D.I. 321 at 52). At the latest, Rockwell contends that the claimed invention was reduced to practice in the 1987 Top 2 Trucks by Cummins during their September 1987 field tests conducted by Gelco to gauge their fuel economy. (D.I. 321 at 52).

In support of its argument that Cummins was first to reduce

the claimed invention to practice, Rockwell directs the Court to the testimony of Dean Anderson and Dr. Richard Klein, an executive engineer for Cummins. According to Rockwell, both Anderson and Klein testified that the 1987 Cummins Top 2 Trucks worked for their intended purpose prior to the September 1987 testing. (D.I. 321 at 52). Rockwell also directs the Court to the testimony of Charles Tyrrell, a Gelco employee during the relevant time period, who rode inside a 1987 Cummins Top 2 Truck for 3000 miles during the September 1987 fuel economy testing. According to Rockwell, Tyrrell testified that the truck worked for its intended purpose during the entire length of this test. (D.I. 321 at 52). In contrast to the evidence supporting a September 1987 reduction to practice by Cummins, Rockwell further contends that Eaton did not even start to test its invention until October 30, 1987, when it was first embodied in a Hertz-Penske truck. (D.I. 321 at 53). Finally, Rockwell contends that the Top 2 Trucks constitute prior art because they were reduced to practice by Cummins nearly one month before Eaton's reduction to practice of the claimed invention.

In response, Eaton contends that there was substantial evidence before the jury to support a conclusion that Cummins never reduced its alleged invention to practice. (D.I. 325 at 9). Specifically, Eaton contends that Cummins' Anderson admitted that he never tested the Top 2 System during the 1987 tests to

see whether an actual torque reversal occurred when attempting to shift the transmission out of gear. (D.I. 325 at 10).

In reply, Rockwell contends that Eaton's contention is undercut by its internal correspondence. Specifically, Rockwell directs the Court to Eaton's notes of an October 26, 1987 meeting between Braun and Anderson, indicating that "[t]hey [Cummins] said they were reversing torque with no perceptible speed change." (D.I. 326 at 5; DTX 91 at 3).

After considering the arguments of the parties, the Court concludes that sufficient evidence exists for a reasonable jury to have concluded that Cummins did not reduce the 1987 Top 2 Trucks to practice. Although tests were conducted on the 1987 Cummins Top 2 Trucks, the jury could have reasonably concluded that these tests were not directed at determining whether an actual torque reversal occurred when attempting to shift the transmission out of gear. For example, Anderson, Cummins' own employee, testified that he did not know if the Top 2 Trucks were ever specifically tested to determine if an actual torque reversal occurred when attempting to shift the transmission out of gear. (Tr. 1511). Anderson further testified that when he drew the actual torque reversal in his diagram of the Top 2 system, it "was a hypothetical." (Tr. 1511). As for the testimony of Kleine and Tyrell, the jury could have reasonably discounted their testimony because Kleine did not even

participate in the September 1987 fuel tests, and Tyrell admitted that he did not know how the Cummins Top 2 system operated. (Tr. 1171-71; Tr. 833-35). Thus, the jury could have reasonably concluded that the devices had at most the theoretical capability, but not the actual capability to perform the method claimed in Claims 14 through 19 of the '236 Patent. Newkirk, 825 F.2d 1581 (requiring an actual reduction to practice and noting that proof of more than theoretical capability is required).

Because the jury could have reasonably concluded that Cummins did not reduce the 1987 Cummins Top 2 Trucks to practice before Eaton reduced the invention to practice, the jury could have likewise reasonably concluded that the Top 2 trucks were not relevant prior art. Having concluded that the jury could have reasonably found that the 1987 Cummins Top 2 trucks were not prior art, the Court need not address the parties' remaining argument concerning anticipation; i.e. whether the Top 2 trucks completely embodied the method or apparatus of the claims at issue. Because the Court cannot conclude that the jury erred in its verdict of validity insofar as the question of anticipation by the Top 2 trucks is concerned, the Court will deny Rockwell's Motion For Judgment As A Matter Of Law on this issue.

**(2) Whether The 1987 Cummins Top 2 Trucks
Are Prior Art Under 35 U.S.C. § 102(a)
As A Matter Of Law**

In pertinent part, 35 U.S.C. § 102(a) provides that "[a] person shall be entitled to a patent unless . . . the invention was known or used by others in this country . . . before the invention thereof by the applicant." 35 U.S.C. § 102(a). In order to establish that an invention was "known" by others, there must be proof that the invention was disclosed in a manner sufficient to enable one skilled in the art to reduce the invention to practice. Application of Lyle B. Borst, 345 F.2d 851, 854-55 (CCPA 1965). Additionally, in order to establish that an invention was "used" by others, there must be proof that others used an invention that was conceived and reduced to practice. Medtronic, Inc. v. Davis Corp., 227 U.S.P.Q. 509, 515 (D. Minn. 1985), aff'd, 789 F.2d 903 (Fed. Cir. 1986).

In this case, the parties' dispute centers on whether the alleged prior art was either "known" or "used" by others. Rockwell contends that the 1987 Cummins Top 2 Trucks constitute prior art because these trucks were both "known" and "used" by members of the general public prior to Braun's earliest date of invention. According to Rockwell, the 1987 Cummins Top 2 Trucks were driven by Gelco on public roads for a 3000 mile fuel economy test in September 1987, approximately one month earlier than Braun's earliest date of invention. (D.I. 321 at 54). Rockwell contends that Braun's earliest date of invention is October 1987, when Braun first embodied his invention in a Hertz-Penske truck.

(D.I. 321 at 54). Additionally, Rockwell contends that members of the press were invited to ride on the trucks during this test, and magazine editors were provided an opportunity to drive the trucks after the test. (D.I. 321 at 54). Finally, Rockwell contends that Gelco issued a press kit immediately following this test to anyone in the industry who was interested. (D.I. 321 at 54). According to Rockwell, this press kit detailed the transmission technology that was embodied in the 1987 Cummins Top 2 Trucks. (D.I. 321 at 54; DTX 482).

In response, Eaton contends that there was substantial evidence before the jury to support a conclusion that the 1987 Cummins Top 2 Trucks were neither "known" nor "used" prior to Braun's earliest date of invention. According to Eaton, Braun's earliest date of invention was in 1977, which was years before the 1987 Cummins Top 2 Trucks were constructed. (D.I. 326 at 12). However, even if Braun's earliest date of invention was October 1987, Eaton contends that the 1987 Cummins Top 2 Trucks were neither "known" nor "used" by others within the meaning of Section 102(a). (D.I. 326 at 12).

After considering the parties' arguments, the Court concludes that sufficient evidence exists for a reasonable jury to have found that the 1987 Cummins Top 2 Trucks were neither "known" nor "used" by others prior to October 1987. Although Gelco issued a press kit detailing the 1987 Cummins Top 2 Trucks,

the jury could have reasonably concluded that this press kit did not disclose the technology of these trucks in sufficient detail to enable a person of ordinary skill in the art to practice the invention. A review of the press kit reveals that it was directed at disclosing the results of the fuel economy test, not the details of the trucks' transmission system. (See DTX 482). In fact, the only thing this press kit discloses with regard to the transmission system is that "[e]xperienced drivers used progressive shifting and other fuel-saving techniques." (DTX 482 at R000103713). Because the press kit was the only evidence produced by Rockwell in support of its contention that the technology embodied in the 1987 Cummins Top 2 Trucks was disclosed and because the press kit lacked a detailed explanation of the relevant technology, a reasonable jury could have concluded that the technology of the Top 2 Trucks was not "known" by others at the time the press kit was distributed. See Application of Lyle B. Borst, 345 F.2d at 854-55 (holding that in order to establish that an invention was "known" by others, there must be proof that the invention was disclosed in a manner sufficient to enable one skilled in the art to reduce the invention to practice).

Further, as the Court explained in the context of Rockwell's Section 102(g) argument, a reasonable jury could have concluded that the transmission technology in these Top 2 Trucks was not

reduced to practice at the time of the September 1987 fuel economy test. Because "use by others" requires use of an invention that is reduced to practice, the Court likewise concludes that a reasonable jury could have concluded that the 1987 Cummins Top 2 Trucks were not "used by others" within the meaning of Section 102(a). Medtronic, Inc., 227 U.S.P.Q. at 515 (holding that in order to establish that an invention was "used" by others, there must be proof that the use was of an invention that was both conceived and reduced to practice).

Because the jury could have reasonably concluded that the technology embodied in the 1987 Cummins Top 2 Trucks was neither "known" nor "used" as a result of their September 1987 testing, the Court concludes that a reasonable jury could have concluded that these Trucks were not relevant prior art. Having concluded that the jury could have reasonably found that the 1987 Top 2 Trucks were not prior art, the Court need not address the parties' remaining arguments concerning anticipation. In sum, the Court cannot conclude that the jury erred in its verdict of validity insofar as the question of anticipation by the 1987 Top 2 Trucks is concerned, and therefore, the Court will deny Rockwell's Motion For Judgment As A Matter Of Law on this issue.

b. Whether The 1986 Gelco-Dana Top 4 Anticipates Claims 14 through 19 Of The '236 Patent As A Matter Of Law

With regard to the 1986 Gelco-Dana Top 4 Trucks, the parties

dispute both whether the Top 4 Truck may properly be considered prior art, and if the Top 4 Truck is prior art, whether the reference renders Claims 14 and 17 of the '236 Patent invalid as anticipated. For purposes of its discussion of the 1986 Gelco-Dana Top 4 Trucks, the Court will assume, without deciding, that the Top 4 Truck is prior art, and turn to the parties' arguments concerning anticipation.

As a general matter, for a patent to be invalid as anticipated by qualifying prior art under 35 U.S.C. § 102, the party challenging validity must show that all of the elements and limitations of the claim are found in the prior art reference. Scripps Clinic & Research Foundation, 927 F.2d at 1576. A jury's verdict of patent validity, indicates that the jury found that no prior art reference completely embodied the method or apparatus of the claims at issue. Harmon, Patents and the Federal Circuit § 3.2 at 81 (4th ed. 1997). Absent special interrogatories, it is presumed from a general verdict of patent validity, that the jury found differences between the claimed inventions and the prior art. Id. In reviewing a jury's verdict that a patent is not anticipated, the court must uphold the verdict if a reasonable jury could find that one or more elements of the patent claims are not found in the purportedly anticipatory reference. See Hazani v. United States International Trade Commission, 125 F.3d 1473, 1477 (Fed. Cir. 1997); Mycogen Plant

Science, Inc. v. Monsanto Co., 61 F. Supp. 2d 199 (D. Del. 1999).

Rockwell contends that each and every element of Claims 14 and 17 of the '236 Patent are found in the Top 4 Trucks. (D.I. 321 at 62). In response, Eaton contends that at least one critical element is absent from the Top 4 Trucks. Specifically, Eaton contends that the step of "increasing" and "decreasing" the supply of fuel to the vehicular engine to ensure a torque reversal as required by step two of Claim 14 is not found in the 1986 Gelco-Dana Top 4 Trucks.

After reviewing the evidence as it pertains to this issue, the Court concludes that sufficient evidence exists from which a reasonable jury could have concluded that the second step of Claim 14 is not found in the Top 4 Trucks. In full, the second step of Claim 14 provides:

- (2) Urging said first and second members of said first clutch into a disengaged condition while, in sequence, increasing the supply of fuel supplied to the vehicular engine to cause the engine to rotate at a speed sufficient to cause said first member of said first positive clutch to drive the second member of said first positive clutch and decreasing the supply of fuel to the engine to cause the second member of said first positive clutch to drive the first member of the first positive clutch.

(PTX 1). The parties do not dispute that this step describes a manner in which to ensure torque reversal. Specifically, this step teaches increasing and decreasing the amount of fuel supplied to the vehicle's engine in order to ensure torque reversal. Rockwell directs the Court to Cummins' March 1986 test

results for the Gelco-Dana Top 4 truck system to support its argument that this element is present. (D.I. 321 at 62). Specifically, Rockwell contends that "throttle blip" was executed during this test, which was the equivalent of "increasing" and "decreasing" the amount of fuel supplied to the engine, and that this "throttle blip" caused a torque reversal. (D.I. 321 at 62-63; DTX 438 at CUM 890). In addition, Rockwell directs the Court to the testimony of Kleine that the method performed by the 1986 Gelco-Dana Top 4 truck system included the step of "increasing" and "decreasing" fuel supply to ensure torque reversal.

After reviewing the record as it relates to this issue, the Court disagrees with Rockwell's premise that the evidence was sufficient for a reasonable jury to conclude that the "throttle blip" ensured a torque reversal. Indeed, Mr. Anderson of Cummins expressed equivocation about the "throttle blip" stating that it "was most likely added to ensure a torque reversal would occur and result in gear disengagement." (DTX 438 at Cum 870) (emphasis added). Further, Anderson explained that "the same two step blip is used on every shift regardless of whether it was required for gear disengagement or not," suggesting that the "throttle blip" may not have been relevant to causing a torque reversal. (DTX 438 at Cum 870). As for Kleine's testimony, the Court likewise concludes that a reasonable jury could have declined to

credit his testimony, because Kleine testified that he was only speculating about what Anderson meant when Anderson discussed the relevance of the "throttle blip" in his report. (Tr. 1218). Because the Court concludes that sufficient evidence exists from which a reasonable jury could have concluded that the "throttle blip" in the Top 4 Trucks did not ensure torque reversal as disclosed in Claim 14, the Court concludes that Rockwell is not entitled to a judgment of invalidity as a matter of law on Claim 14 of the '236 Patent.

Because the Court concludes that a reasonable jury could have concluded that the Top 4 Truck lacked each and every element of Claim 14 of the '236 Patent, the Court likewise concludes that the jury could have reasonably found Claims 14 and 17 valid, because Claim 17 is dependent on Claim 14.⁵ See 35 U.S.C. 112, ¶ 2 (dependent claims "incorporate by reference all of the limitations of the claim to which it refers"); In re Royka, 490 F.2d 981, 983-984 (C.C.P.A. 1974) (recognizing that if an independent claim is not anticipated, its dependent claims are

⁵ Initially, Rockwell contended that the 1986 Gelco-Dana Top 4 Truck not only anticipates Claims 14 and 17 of the '236 Patent, but also anticipates Claims 15, 16, 18, and 19. Unlike Claims 14 and 17, Claims 15, 16, 18, and 19 all contain an element of "sensing." In its Reply, Rockwell appears to have abandoned its anticipation argument with regard to Claims, 15, 16, 18, and 19. In any event, the Court concludes that Rockwell is not entitled to a judgment of invalidity as a matter of law on these claims, because Rockwell failed to provide any evidence that the "sensing" element was found in the 1986 Gelco-Dana Top 4 Truck.

also not anticipated).

**c. Whether The Vukovich '228 Patent Anticipates
The '236 Patent As A Matter Of Law**

The undisputed evidence establishes that the Vukovich '228 Patent was issued more than one year before the filing date of the '236 Patent. (D.I. 321 at 63; DTX 525; PTX 1). Thus, the parties agree that the Vukovich '228 Patent constitutes prior art under 35 U.S.C. § 102(b). Accordingly, the Court will turn to the parties' arguments on anticipation.

Rockwell contends that each and every element of Claims 14 through 19 of the '236 Patent are found in the Vukovich '228 Patent. (D.I. 321 at 64-67). Specifically, Rockwell directs the Court to the Vukovich '228 Patent itself and Eaton's answers to requests for admissions. (D.I. 321 at 64-67). According to Rockwell, these two pieces of evidence clearly establish that the Vukovich '228 Patent anticipates the '236 Patent. (D.I. 321 at 64-67). In response, Eaton directs the Court to the testimony of Dr. Edward Caulfield that the Vukovich '228 Patent is not even related to the '236 Patent. (D.I. 325 at 15). In reply, Rockwell contends that Caulfield's testimony should be discounted, as Eaton attacked this testimony when opposing the "Best Mode" portion of this Motion For Judgment As A Matter Of Law. (D.I. 326 at 9).

The Court concludes that there is sufficient evidence to support a finding that the '228 Vukovich Patent does not

anticipate Claims 14 through 19 of the '236 Patent.

Specifically, Eaton's expert witness, Caulfield, testified:

Q: Does the Vukovich patent have anything to do with the '236 patent?

A: No.

Q. All right. And why is that?

A: What the Vukovich patent does is basically cuts off the ignition to the engine. It has nothing to do with fuel dithering. Clearly, the claims that we have here talks about varying the fuel. When they say vary the fuel, this is dither. Up and down, up and down is dither. All that patent does, the Vukovich, is cut off the spark. That's all that does to the engine. Shuts down the engine to get the shift out. It doesn't do anything else other than that. So it doesn't even come close to the technology in the Eaton '236 as far as in an automatic fashion.

(Tr. 249-50). Despite this testimony, Rockwell chose not to cross-examine Caulfield and relied solely upon Eaton's answers to requests for admissions and the Vukovich '228 Patent itself to support its claim of anticipation. Additionally, Rockwell contends that Caulfield's testimony should be discounted, however, in reviewing a motion for judgment as a matter of law, the Court cannot re-weigh the evidence or substitute its judgment for that of the jury. See Lifescan, Inc., 103 F. Supp. 2d at 350 (holding that the Court must refrain from substituting its own interpretation of the evidence in place of the jury's interpretation). Because the Court concludes that Caulfield's testimony alone constitutes sufficient evidence from which a reasonable jury could have concluded that the Vukovich '228

Patent is entirely different from the '236 Patent, the Court cannot conclude that the jury erred in finding the '236 Patent valid. Accordingly, the Court will deny Rockwell's Motion For Judgment As A Matter Of Law on this issue.

5. Whether Claims 14 through 19 Of The '236 Patent Are Obvious In Light Of The Prior Art As A Matter Of Law

By its Motion, Rockwell contends that Claims 14 through 19 of the '236 Patent are obvious in light of the prior art as a matter of law. (D.I. 321 at 67). Specifically, Rockwell contends that Claims 14 through 19 of the '236 Patent are obvious in light of five alleged prior art references: (1) the Vukovich '228 Patent; (2) the 1986 Gelco-Dana Top 4 Truck; (3) the 1987 Cummins Top 2 Trucks; (4) the article "Drivetrains Are Going Electronic;" and (5) the manual float shifting technique utilized by experienced truck drivers to manipulate the throttle. (D.I. 321 at 68-69). With regard to Rockwell's reference to the 1987 Cummins Top 2 Trucks, the Court has previously concluded that the Top 2 trucks are not properly considered prior art, and therefore, the Court will not discuss the Top 2 Trucks as they pertain to Rockwell's obviousness argument. As for the remaining alleged prior art references, the Court will assume, without deciding, that these references are qualifying prior art and turn to the parties remaining obviousness arguments.

A patent may not be obtained "if the differences between the

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103. In applying this nonobviousness condition on patentability, "several basic factual inquiries" should initially be made. Graham v. John Deere, 383 U.S. 1, 17 (1966). Specifically, these inquiries include: 1) "the scope and content of the prior art," 2) "differences between the prior art and the claims at issue," and 3) "the level or ordinary skill in the pertinent art." Id. Obviousness or nonobviousness of the subject matter is then determined using these inquiries as a background.⁶ Id.

After reviewing the evidence as it relates to this issue, the Court cannot conclude that the jury erred as a matter of law in its verdict of validity. Attempting to establish the scope and content of the prior art and the lack of significant differences between the prior art and the claims at issue, Rockwell relied only upon the text of the Vukovick '228 Patent, the '236 Patent, and Eaton's answers to requests for admissions. Rockwell offered no other testimony or evidence explaining how

⁶Secondary considerations, such as long felt need, commercial success and failure of others should also be considered in an obviousness or nonobviousness determination. Id. at 17-18. However, these considerations are not at issue in this case, and therefore, the Court declines to address them further.

these prior art references rendered the patent invalid. It is well recognized that "a jury or a court may reach a conclusion that a patent remains valid *solely* on the failure of the patent challenger's evidence to convincingly establish the contrary." Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1570-71 (Fed. Cir. 1986). Because the jury could have reasonably concluded that Rockwell's evidence was insufficient to establish invalidity by clear and convincing evidence, the Court cannot conclude that the jury's verdict was erroneous as a matter of law.

Further, Rockwell failed to admit any evidence regarding the level of ordinary skill in the art. Rockwell contends that its failure to present such evidence is a result of the Court's decision to preclude its technical expert, Donovan Robinson, from testifying. As the Court will discuss in further detail in Section II(B) of this Memorandum Opinion, Robinson was precluded from offering his opinion because the Court determined that he did not have the requisite education, experience and knowledge of the subject matter and prior art to assist the jury on the issues before them. It is well recognized that when a party challenging the validity of a patent fails to offer evidence on the level of skill in the art, that party fails to meet its burden of proof. Universal Athletic Sales Co. v. American Gym, Recreational & Athletic Equip. Corp., 546 F.2d 530, 543 (3rd Cir. 1976), cert.

denied, 430 U.S. 984 (1977) (stating “[t]he trial judge suggested that the record as to the level of ordinary skill in the pertinent art was ‘deficient.’ Having so indicated, he should have refused to invalidate the challenged patent claims as obvious.”). While the Court precluded Robinson from testifying, the Court did not preclude Rockwell from introducing any evidence on the issue. Indeed, Rockwell could have introduced other testimony or evidence to establish the level of skill in the art, but chose not to. Given the lack of evidence presented by Rockwell on the scope, content and differences between the prior art and the claims at issue, and Rockwell’s failure to offer any evidence on the level of skill in the art, the Court cannot conclude that the jury’s verdict of validity was erroneous. Accordingly, Rockwell’s Motion For Judgment As A Matter Of Law on the issue of validity in the context of obviousness will be denied.

B. Whether Claims 14 through 19 Of The '236 Patent Are Literally Infringed As A Matter Of Law

By its Motion, Rockwell contends that it is entitled to judgment as a matter of law on the issue of literal infringement. (D.I. 321 at 73). Specifically, Rockwell raises two issues: (1) the Court’s claim construction was erroneous and under a different claim construction Rockwell would be entitled to Judgment As A Matter Of Law, and (2) under the Court’s current claim construction a reasonable jury could not have found that

the break torque function of the ESS vehicle obtains torque break by dithering speed, as is required by Claims 14 through 19 of the '236 Patent. The Court will address each of Rockwell's claims.

1. Whether The Court's Claim Construction Was Erroneous Such That Rockwell Is Entitled To A Judgment Of Non-Infringement As A Matter Of Law

Rockwell bases its argument that it is entitled to a judgment of non-infringement as a matter of law on the premise that the Court's claim construction was improper. (D.I. 321 at 74). Generally, Rockwell alleges that Claim 14 of the '236 Patent should be limited by both the specification of the '236 Patent and the preamble of Claim 14. (D.I. 321 at 73-87). In support of its argument, Rockwell reiterates the arguments it made before the Court on three previous occasions; first in its preliminary injunction briefings, second in its claim construction briefings, and finally at the Markman hearing itself. (See D.I. 321 at 73-87, 156, 157, 158, and 161). The Court addressed these arguments initially in its memorandum opinion resolving Eaton's preliminary injunction motion, and again at the outset of the trial when the Court essentially adopted the construction it rendered in the context of Eaton's injunction motion. (See D.I. 37 at 10-16, Tr. 36-37). Though in the context of a preliminary injunction opinion, the Court set forth in detail its initial impression of the parties' claim construction arguments. (See D.I. 37 at 10-16). After

considering the evidence submitted at the Markman hearing and the parties' claim construction briefings, the Court concluded that its initial impressions were correct and the Court announced its claim construction at trial in a manner consistent with that set forth in the context of the preliminary injunction opinion. (See Tr. 36-37; D.I. 37 at 10-16). Specifically, the Court concluded:

(1) that Claim 14 is an independent claim upon which Claims 15 through 19 are dependent; (2) Claim 14 is a method claim which claims an automated or automatic vehicle driveline system; (3) the term "automatic" as used in Claim 14 refers to the control of the driveline, not the gear shifting apparatus required to operate the transmission.

(Tr. 36-37). Because the Court has previously considered and rejected the claim construction offered by Rockwell, the Court declines to revisit this issue again. Accordingly, Rockwell's Motion For Judgment As A Matter Of Law on the issue of infringement will be denied insofar as it seeks to reargue the Court's claim construction rulings.

2. Whether A Reasonable Jury Could Have Concluded That The Break Torque Function Of The ESS System Obtains Torque Break By Dithering Speed Under The Court's Current Claim Construction

Under the Court's claim construction, Rockwell makes only one literal infringement argument. Rockwell contends that it is entitled to judgment as a matter of law on the issue of literal infringement because no reasonable jury could have found that the break torque function of the ESS system obtains torque break by

dithering speed, as is required by Claims 14 through 19 of the '236 Patent. (D.I. 321 at 87). In support of this contention, Rockwell relies solely on the testimony of Edward M. Bacon, one of the listed inventors of Meritor's '558 patent. (D.I. 321 at 88).

After reviewing the record as it relates to this issue, the Court concludes that Eaton presented sufficient evidence such that a reasonable jury could have concluded that the break torque element in Claim 14 through 19 of the '236 Patent is present in the accused ESS system. Literal infringement occurs when each limitation of a claim is found in the allegedly infringing device. Yenzer v. Agrotors, Inc., 764 F. Supp 974, 980 (M.D. Pa. 1991) (citing Mannesmann Demag Corp. v. Engineering Metal Prods. Co., 793 F.2d 1279 1282 (Fed. Cir. 1986)). Rockwell relies on that portion of Bacon's testimony suggesting that the "break torque function" of the ESS system is performed by controlling torque, rather than speed. (See Tr. at 1016-17). However, Eaton's Caulfield testified that controlling torque is synonymous with controlling speed for the purposes of the break torque function defined in Claims 14 through 19 of the '236 Patent. (See Tr. 294). Because a reasonable jury could have credited Caulfield's testimony over the testimony of Bacon on this issue, the Court cannot conclude that the jury's verdict of literal infringement was erroneous. Accordingly, the Court will deny

Rockwell's Motion For Judgment As A Matter Of Law on the issue of literal infringement.

C. Whether Claims 14 through 19 Of The '236 Patent Are Willfully Infringed As A Matter Of Law

Rockwell contends that the jury's verdict of willful infringement is not supported by sufficient evidence. Specifically, Rockwell contends that Eaton failed to establish willful infringement because Rockwell obtained the advice of competent legal counsel before proceeding with its allegedly infringing activities.

A finding of willful infringement requires clear and convincing evidence in light of the totality of the circumstances that a defendant had actual notice of the plaintiff's patent and lacked a reasonable good faith basis for acting as it did. Amsted Industries v. Buckeye Steel Castings, 24 F.3d 178, 181 (Fed. Cir. 1994). As a general matter, a potential infringer who has actual notice of another's patent rights has an affirmative duty to respect those rights. Rolls-Royce, Ltd. v. GTE Valeron Corp., 800 F.2d 1101, 1109 (Fed. Cir. 1986). Normally, this duty entails obtaining the advice of legal counsel. Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 1579 (Fed. Cir. 1986).

After reviewing the evidence as it relates to the issue of willful infringement, the Court concludes that the jury's finding of willfulness is supported by substantial evidence. It is

undisputed that Rockwell had actual knowledge of the '236 Patent. Thus, the relevant inquiry is whether substantial evidence exists to support the conclusion that Rockwell lacked a reasonable good faith basis for introducing the ESS system into the market. Rockwell contends that its good faith is illustrated by the fact that it obtained the advice of outside patent counsel, Theodore Olds, III, before introducing the ESS system into the market. (D.I. 321 at 93-99). Olds conducted an infringement analysis which considered the '236 Patent and concluded that the ESS system did not infringe. (D.I. 321 at 93-99). In response, Eaton contends that the evidence was sufficient to establish that Olds' opinion was not competent, and thus, Rockwell was not reasonable in relying upon it. (D.I. 325 at 23-24).

After reviewing the evidence as it relates to Olds' opinion, the Court concludes that a reasonable jury could have concluded that Olds' opinion was insufficient to provide Rockwell with a good faith basis for continuing its alleged infringing activity. Willful infringement has been found despite the presence of a legal opinion in situations where the opinion of counsel was either ignored or found to be incompetent. See Datascope Corp. v. SMEC, Inc., 879 F.2d 820, 828-29 (Fed. Cir. 1989). In these situations, the primary inquiry is whether the accused infringer's reliance on the opinion was reasonable in light of the objective evidence. Such an inquiry entails a review of the

opinion itself, as the opinion "may be incompetent on its face by reason of its containing merely conclusory statements without discussion of facts or obviously presenting only a superficial or off-the-cuff analysis." Read v. Portec, 970 F.2d 816, 829 (Fed. Cir. 1992). To this effect, the opinion should be reviewed for its overall tone, its discussion of case law, its analysis of particular facts, including the prior art and prosecution history relevant patents, and its reference to inequitable conduct. Westvaco Corp. v. International Paper Co., 991 F.2d 735, 743-44 (Fed. Cir. 1993).

Reviewing Olds' opinion, the Court notes that Olds never addresses the facts surrounding the '236 Patent or the ESS system. (See PTX 25). In addition, Olds does not mention any case law and does not discuss the prosecution history of the '236 Patent. (See PTX 25). Olds addressed the '236 Patent one time in his opinion:

The Rockwell System is manual shifted. Several of the prior art reference claims require automatic or semi-automatic actuation of a gear shift in a transmission. Many of these references may relate to systems where an operator requests the shift and the shift is then performed by automatic means. The Rockwell System includes no such corresponding structure.

(PTX 25 at 4). Without further analysis, Olds concluded that the ESS system did not infringe the '236 Patent. (See PTX 25). In addition to the lack of detail and analysis in Olds' opinion, the testimony of both Olds and Charles Allen undercuts the opinion

they rendered.⁷ For example, Allen testified that he reviewed the '236 Patent with Olds, and that his review of the '236 Patent consisted of a mere "skimming" of the text. (Tr. 347-48). Additionally, Olds testified that he had no specific recollection of having read the '236 Patent. (Tr. 530). Because a reasonable jury could have concluded that Rockwell unreasonably relied on an incompetent opinion of counsel, the Court cannot conclude that the jury's verdict of willful infringement was erroneous.⁸ Accordingly, the Court will deny Rockwell's Motion For Judgment As A Matter Of Law on the issue of willful infringement.

II. Whether Rockwell Is Entitled To A New Trial

As an alternative form of relief to their Motion For Judgment As A Matter Of Law, Rockwell seeks a new trial on six grounds. Specifically, Rockwell contends that: (1) the verdict is against the clear weight of the evidence; (2) the Court erred

⁷Charles Allen is a Rockwell engineer who worked on the opinion with Olds.

⁸In an additional attempt to illustrate its good faith, Rockwell contends that it introduced evidence that it did not deliberately try to copy Claims 14 through 19 of the '236 Patent, but rather independently designed and developed the ESS transmission system. (D.I. 321 at 90-93). Specifically, Rockwell contends that, while it did consider a transmission that automatically shifted in the top two gears, it decided not to build such a transmission, as the market was seeking a system that gave drivers complete control over the shifting of every gear. (D.I. 321 at 93; See Tr. 581-82). Although this is one factor that may have weighed in favor of Rockwell on the willful infringement issue, the Court cannot reassess the weight of this evidence.

in excluding the testimony of Donovan L. Robinson; (3) it was severely prejudiced by the timing of the Court's claim construction rulings; (4) the Court erred in permitting Braun to testify by video telephone; (5) it was severely prejudiced by the Court's delay in adding Meritor as an additional party; and (6) the verdict was excessive. The Court will address each of Rockwell's arguments in turn.

A. Whether The Verdict Is Against The Clear Weight Of The Evidence Such That A New Trial Should Be Granted

Rockwell contends that the jury's verdict is against the clear weight of the evidence. Specifically, Rockwell reiterates the arguments it made in the context of its Motion For Judgment As A Matter Of Law.

The Court concludes that the jury's verdict was not contrary to the clear weight of the evidence. A trial court may grant a new trial on the basis that the verdict was against the clear weight of the evidence, but only if the verdict was so unreasonable that a miscarriage of justice would result if the verdict were to stand. Lifescan, Inc., 103 F. Supp. 2d at 351. On the question of validity, the Court has previously concluded that the jury's verdict was not erroneous because a reasonable jury could have concluded that Rockwell did not offer sufficient evidence to establish invalidity by clear and convincing evidence.

On the question of infringement, Rockwell's argument is

based primarily on its contention that the Court improperly construed the claims. Because the Court is not persuaded by the argument of Rockwell on this issue, the Court must reject Rockwell's request for a new trial.

B. Whether The Court Erred In Excluding The Testimony Of Rockwell's Expert, Donovan L. Robinson, Such That A New Trial Is Warranted

Rockwell contends that the Court's improper refusal to admit the testimony of its expert witness, Donovan L. Robinson, requires a new trial. (D.I. 321 at 103). Rockwell offered Robinson as an expert regarding non-infringement and invalidity. At trial, Eaton challenged Robinson's qualifications, arguing that he was not an expert in "breaking torque," was not an expert in the ESS system, and was not qualified to discuss the Vukovich '228 Patent. After considering Robinson's qualifications, the Court concluded that Robinson did not have the requisite education, experience and knowledge of the subject matter and prior art to assist the jury on the central issues in the case.

In order to qualify as an expert witness under the Federal Rules of Evidence, a proffered witness must possess the necessary knowledge, skill, training or education, must testify to scientific, technical, or other specialized knowledge, and must testify to matters which would assist the trier of fact. Lauria v. National Railroad Passenger Corp., 145 F.3d 593, 597 (3rd Cir. 1998) (interpreting Fed. R. Evid. 702). In considering these

factors, courts have been particularly mindful of their duty to prevent unqualified witnesses from testifying. Marco v. Accent Publishing Co., Inc., 969 F.2d 1547, 1552 (3rd Cir. 1992) (holding that the trial court did not abuse discretion in excluding testimony of expert whose qualifications were questionable and whose testimony appeared to have been equivocal). The decision of whether to admit expert testimony is committed to the discretion of the trial court. See id.

After reviewing the record on this issue, the Court concludes that its exclusion of Robinson's testimony was warranted. The Court precluded Robinson from offering his opinion, because the Court determined that he did not have the requisite education, experience and knowledge of the subject matter and prior art to assist the jury on the issues in the case. (See Tr. 1334-36). Specifically, the Court concluded that "the concept of dithering or breaking torque" was a central issue before the jury, and that Robinson was not qualified to testify on this issue. (Tr. 1334). Although Robinson worked with transmissions for almost four decades, he testified that he only worked on transmissions having a master clutch for a small portion of time. (Tr. 1297). Additionally, Robinson testified that he did not know how the ESS system controlled fuel, broke torque or dithered. (Tr. 1294, 1300). Robinson also testified that he was not an expert in breaking torque or in the ESS

system. (Tr. 1293, 1299). Finally, Robinson testified at his deposition that he was not qualified to opine about how the Vukovich '228 Patent teaches the interruption of an engine ignition, but that he has since "done quite a bit of study on Vukovich . . ." (Tr. 1325). Because dithering and torque reversal in a master clutch transmission were central issues in this case and Robinson lacked the required skill and formal training to testify about these matters, the Court cannot conclude that its exclusion of Robinson's testimony was erroneous. Accordingly, Rockwell's Motion For A New Trial on these grounds will be denied.

C. Whether Rockwell Was Prejudiced By The Timing Of The Court's Claim Construction Rulings Such That A New Trial Is Warranted

Rockwell next contends that it was severely prejudiced by the "surprise" of the Court's claim construction rulings, combined with the timing of those rulings, such that a new trial is warranted. Specifically, Rockwell contends that the Court rejected Eaton's own admissions in its claim construction rulings, thereby creating "surprise" rulings that interfered with Rockwell's trial preparations. (D.I. 321 at 110-11). In addition, Rockwell contends that the timing of the Court's claim construction rulings at the beginning of the trial resulted in the exclusion of the testimony of Robinson and a prohibition on the content of Rockwell's opening argument such that Rockwell

could not argue that the preamble limited Claim 14. (D.I. 321 at 110-11). According to Rockwell, the timing of these rulings prejudiced its ability to find an expert with a concentration in diesel engine experience, rather than transmission experience, and hampered its ability to present a better opening statement. (D.I. 321 at 110-11).

The Court is not persuaded that Rockwell's claim of prejudicial surprise as a result of the Court's claim construction rulings is supported by the record. The Court provided the parties with a detailed first impression of its claim interpretation in its memorandum opinion resolving Eaton's preliminary injunction motion. (See D.I. 37 at 10-16). Despite Rockwell's contention, the Court's interpretation was not contrary to or inconsistent with Eaton's admissions. (See Tr. 36-37; D.I. 2; D.I. 3; D.I. 29; D.I. 155). In the later Markman briefing in this case, Rockwell reargued many of the same points it made in the context of Eaton's preliminary injunction motion. (See D.I. 27; D.I. 156; D.I. 158). Concluding that its first impression was correct and that the parties had not advanced any additional arguments that persuaded the Court to take a different approach, the Court issued claim construction rulings at the beginning of the trial that were consistent with the Court's initial rulings which were provided to the parties months before the trial in this case. (See Tr. 36-37; D.I. 37 at 10-16).

Given that Rockwell advanced many of the same claim construction arguments in its Markman briefing that the Court rejected in its preliminary injunction memorandum opinion and the fact that the parties were well aware of the Court's view regarding the claim construction issues early on in the case, the Court cannot accept Rockwell's argument that it was unfairly surprised by the Court's claim construction rulings.

As for the timing of the Court's claim construction rulings at the commencement of trial, the Court is likewise not persuaded by Rockwell's claim of undue prejudice. The Court has issued claim construction rulings at different junctures during the course of the many patent cases it has been assigned. Indeed, the Court has waited until the jury charge to issue its claim construction rulings in some instances. See Lucent Technologies, Inc. v. Newbridge Networks Corp., et al., Civil Action No. 97-347-JJF, Op. at 9 (D. Del. Sept. 21, 2001) (Farnan, J.); Elf Atochem North America, Inc. v. Libbey-Owens-Ford Co., Inc., 894 F. Supp. 844, 850 (D. Del. 1995) (McKelvie, J.). While several factors guide the Court's decision regarding when to issue claim construction rulings, the Court's primary goal is obtaining a thorough and complete understanding of the technology and the patents involved so as to provide the parties and the jury with the most accurate claim construction possible. See Lucent Technologies, Inc., Civil Action No. 97-347-JJF, at 9;

Sofamor Danek Group, Inc. v. DePuy-Motech, Inc., 74 F.3d 1216, 1221 (Fed. Cir. 1996) (holding that a trial court can wait until a full and clear picture of the claimed invention and prior art have been presented before interpreting the claims).

After witnessing the trial and reviewing the record in this case, the Court is confident that both parties were afforded the opportunity to fairly present their case and respond to their opponent's case. Indeed, in this case, both parties had the benefit of having the Court's initial impressions on claim construction months in advance of trial, thereby enabling both parties to plan their trial strategies. Because the Court cannot conclude that the timing and nature of its claim construction rulings unduly prejudiced either party so as to warrant a new trial, the Court will deny Rockwell's Motion For A New Trial.

D. Whether Rockwell Was Prejudiced By Permitting Braun To Testify By Video Telephone Such That A New Trial Is Warranted

Rockwell next contends that permitting Braun to testify by video telephone from Detroit was prejudicial error requiring a new trial. (D.I. 321 at 111). Specifically, Rockwell contends that it was deprived of any real ability to prepare for and cross-examine Braun, because Rockwell could not duplicate the Delaware courtroom in Detroit by taking every exhibit to Detroit, and Eaton did not reveal its intention to call Braun by video telephone until shortly before trial. (D.I. 321 at 112).

Additionally, Rockwell contends that by permitting Braun to testify by video telephone, it was deprived the opportunity to confront Braun with videotape of his deposition testimony. (D.I. 321 at 112). Further, Rockwell contends that it was prevented from presenting Braun's testimony by videotape under Fed. R. Civ. P. 32 because Eaton chose not to directly examine Braun during his deposition testimony. (D.I. 321 at 11-12).

"The court may, for good cause shown in compelling circumstances and upon appropriate safeguards, permit presentation of testimony in open court by contemporaneous transmission from a different location." Fed. R. Civ. P. 43(a). At the time of the trial in this matter, Braun lived in Detroit and was so severely ill with diabetes that his doctor specifically advised him not to travel. (D.I. 228 at 24, 26). In these circumstances, the Court concluded that Braun should be permitted to testify by video telephone. However, in accordance with Rule 43, the Court also implemented certain safeguards aimed specifically at avoiding undue prejudice to Rockwell. For example, the Court recognized that Rockwell might wish to send trial counsel to Detroit to cross-examine Braun in person. To accommodate this possibility, the Court directed that Eaton was to bear the cost if Rockwell choose to have trial counsel present in Detroit. (D.I. 228 at 24). Further, the Court recognized that permitting Braun to testify by video telephone deprived

Rockwell of the opportunity to confront Braun with the video-tape of his deposition testimony. To address this matter, the Court directed Rockwell to confront Braun with the script of his deposition, but also permitted Rockwell to supplement its cross-examination by a further presentation of Braun's video deposition in its direct case. (D.I. 228 at 27).

Because the Court took measures to ensure fairness to both parties as a result of its decision to allow Braun to testify by video telephone, the Court concludes that Rockwell was not unduly prejudiced and a new trial is not warranted.

E. Whether Defendant Meritor Was Prejudiced When The Court Granted Eaton's Motion To Add Meritor As An Additional Defendant Shortly Before Trial Such That A New Trial Is Warranted

By its Motion, Defendant Meritor contends that it is entitled to a new trial because the Court granted Eaton's motion to add Meritor as an additional defendant twelve days before trial. Specifically, Meritor contends that it was severely prejudiced by the timing of the decision, because Meritor was denied the opportunity to obtain separate counsel and additional witnesses, to propound and participate in discovery, to make an opening and closing statement, and to make additional objections to evidence. (D.I. 321 at 113).

It is well established that leave to amend shall be "freely given" in the absence of any declared reason to deny such leave, such as undue prejudice to the non-moving party. See Fed. R.

Civ. P. 15; Foman v. Davis, 371 U.S. 178, 182 (1962). Consistent with this principle, the Court granted Eaton's motion to amend its complaint to add Meritor as an additional party. (D.I. 218).

The Court was not persuaded then, nor is it now, that Meritor was unduly prejudiced as a result of the Court's decision.

Specifically, Meritor has not denied that its interests were directly aligned with Rockwell's interests. In addition, Meritor has not denied that it attended depositions, exchanged discovery, and filed an answer and counterclaim in this case well prior to the date it was officially added as a party defendant. Meritor has also not persuaded the Court that it would have proceeded in a manner different than its predecessor Rockwell, and therefore, the Court concludes that Rockwell was not unduly prejudiced.

Accordingly, the Court will deny Rockwell's Motion For A New Trial.

F. Whether The Verdict Was So Grossly Excessive Such That A New Trial Is Warranted

Rockwell contends that it is entitled to a new trial because the jury's damage award is unreasonable. (D.I. 321 at 114).

Specifically, Rockwell contends that the 13% profit margin that was adopted by Eaton's damages expert, Harry Manbeck, was based on mere speculation. (D.I. 321 at 114). Rockwell contends that Manbeck relied only on Eaton's vehicle component segment, as reported in Eaton's 1997 10-K, in arriving at this percentage.

(D.I. 321 at 115). Because Eaton's 1997 10-K does not set forth

the profits earned on transmissions covered by the '236 Patent, Rockwell contends that the jury could not have reasonably relied on Manbeck's opinion. (D.I. 321 at 116).

In addition to challenging the grounds for Manbeck's opinion, Rockwell also challenges the application of the opinion. Specifically, Rockwell contends that it was inappropriate for Manbeck to suggest that the 13% royalty should be applied to the sales price of an entire ESS transmission. (D.I. 321 at 117). Rockwell contends that it is undisputed that the ESS is an option added to a base manual transmission. (D.I. 321 at 117). Accordingly, Rockwell contends that by applying the 13% royalty to the ESS transmission system as a whole, the jury rendered an unreasonable and grossly excessive damage award. (D.I. 321 at 118).

Whenever a jury finds that a patent has been infringed, the patent owner is entitled to an award of damages which adequately compensates the owner for that infringement and which is not less than a reasonable royalty for the infringer's use of the patent. 35 U.S.C. § 284. What constitutes a "reasonable royalty" depends on the evidence presented and the particular facts of each case. The trier-of-fact has broad discretion in determining a reasonable royalty. Georgia-Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), modified, 446 F.2d 295 (2nd Cir.), cert. denied, 404 U.S. 870 (1971).

However, that discretion is generally guided by fifteen factors set forth by the United States Southern District of New York Court in the Georgia-Pacific case.⁹ To support an award of damages based on a reasonable royalty, the injured party need only adduce evidence with respect to those factors which are relevant in the circumstances of the particular case. See Dragan, 12 U.S.P.Q.2d 1081.

After reviewing the evidence as it relates to the royalty rate accepted by the jury, the Court cannot conclude that the

⁹Specifically, the Georgia-Pacific factors include:

1. Royalties received for licensing the patent at issue;
2. Rates paid by licensee for use of comparable patents;
3. Nature and scope of contemplated license;
4. Licensor's established policy and marketing program;
5. Commercial relationship of licensee and licensor;
6. The effect or value of the patented product in promoting or generating sales of non-patented items by the licensee and licensor and the extent of derivative sales;
7. Duration remaining on the patent and license term;
8. Established profitability, commercial success and current popularity of the patented product;
9. Utility and advantages of patented product over old modes or devices;
10. Nature of patent, character of commercial product, benefit to users;
11. Extent of infringer's use, the value of that use;
12. Portion of profit customary in the business to allow for the use of the invention;
13. Portion of the realizable profit creditable to the invention, distinguished from non-patented elements;
14. Opinion testimony of qualified experts;
15. Amount that a licensor and licensee would have agreed upon if both had been reasonably and voluntarily trying to reach an agreement with respect to a royalty.

318 F. Supp. at 1120-21.

jury's verdict was erroneous such that a new trial is warranted. Eaton presented substantial evidence from which the jury could have arrived at a 13% royalty. First, Eaton's damages expert, Manbeck, testified that a royalty of 13% would adequately compensate Eaton for Rockwell's infringement. (Tr. 456). Manbeck explained that this calculation was partially based upon his general rule of thumb, which is to give between 1/4 and 1/3 of an infringer's profit to the owner of the infringed property. (Tr.455). Additionally, Manbeck highlighted that he took into account the commercial relationship between the parties, the fact that they were direct competitors at the time of the infringement, the existing value of the '236 Patent to Rockwell as a generator of ESS system transmission sales, and the commercial success and current popularity of products utilizing the '236 Patent. (Tr. 450). The jury has broad discretion in determining a reasonable royalty, and the jury was free to give as much or as little weight to Manbeck's testimony as they wished. See Georgia-Pacific Corp., 318 F. Supp. at 1120. Because the Court cannot conclude that the jury's decision to credit Manbeck's testimony was erroneous or against the weight of the evidence, the Court cannot conclude that the jury's 13% royalty finding was so speculative as to shock the conscience of the Court. See Lifescan, Inc., 103 F. Supp. 2d at 350 (holding that a court should only grant a Rule 59 motion for a New Trial

if the jury's verdict shocks the conscience of the court).

As for Eaton's contention that the jury inappropriately applied the royalty, the Court likewise concludes that the jury's verdict was not against the weight of the evidence or so shocking as to warrant a new trial. When a patent-related feature is the basis for customer demand, damages may be based upon the value of the entire apparatus, despite the fact that other elements may not be patented. Rite-Hite Corp. v. Kelly Co., Inc., 56 F.3d 1538, 1549 (Fed. Cir. 1995). In this case, Manbeck testified that he believed Rockwell would not have been able to sell a transmission if that transmission did not include the ESS option. (Tr. 474). In supporting his statement, Manbeck referenced a Rockwell document which stated:

Although the payback period is higher than traditionally expected, the objective of ESS is to enable Transmissions to increase the market share of our base business, not just the profitable on this product option. The ESS technology is essential for continued market acceptance of Rockwell transmissions.

(Tr. 449 (referencing said document)). In view of this testimony, the Court cannot conclude that the jury's calculation of damages based upon the sale price of an entire ESS transmission system was contrary to the weight of the evidence or excessively shocking such that a new trial is warranted. See Lifescan, Inc., 103 F. Supp. 2d at 350 (indicating that a new trial may be granted if the verdict is against the great weight of the evidence). Accordingly, the Court will deny Rockwell's

Motion For A New Trial.¹⁰

CONCLUSION

For the reasons discussed, the Court has entered an Order denying Defendants' Renewed Motion For Judgment As A Matter Of Law (D.I. 312-1) pursuant to Federal Rule of Civil Procedure 50(b). (See D.I. 476). In addition, for the reasons discussed, the Court will enter an Order denying Defendants' Motion For A New Trial Or Remittitur (D.I. 312-2) pursuant to Federal Rule of Civil Procedure 59.

¹⁰Rockwell has also alternatively requested remittitur. (D.I. 321 at 114). The Court finds that evidence exists to support the jury's damages award and the award is reasonable, and therefore, the alternate request for remittitur will be denied.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

EATON CORPORATION,	:	
	:	
Plaintiff,	:	
	:	
v.	:	C.A. No. 97-421-JJF
	:	
ROCKWELL INTERNATIONAL	:	
CORPORATION and MERITOR	:	
AUTOMOTIVE, INC.,	:	
	:	
Defendants.	:	

O R D E R

At Wilmington this 10 day of October, 2001, for the reasons set forth in the Memorandum Opinion issued this date;

IT IS HEREBY ORDERED that Defendants' Motion For A New Trial or Remittitur (D.I. 312-2) is **DENIED**.

JOSEPH J. FARNAN, JR.
UNITED STATES DISTRICT JUDGE