

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

ROBERT BOSCH, LLC,)	
)	
Plaintiff,)	
)	
v.)	Civ. No. 08-542-SLR
)	
PYLON MANUFACTURING CORP.,)	
)	
Defendant.)	

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MEMORANDUM OPINION

Dated: November 3, 2010
Wilmington, Delaware


ROBINSON, District Judge

I. INTRODUCTION

Presently before the court are six motions brought in this patent infringement action involving Robert Bosch LLC (“Bosch”) and Pylon Manufacturing Corp. (“Pylon”) relating to Bosch’s United States Patent Nos. 6,292,974 (“the ‘974 patent”), 6,675,434 (“the ‘434 patent”), and 6,944,905 (“the ‘905 patent”) (collectively, the “Bosch patents”). (D.I. 1) The procedural history of this action is complex and is described in greater detail below. Pending before the court are: (1) Bosch’s renewed motion for judgment as a matter of law (“JMOL”) or, in the alternative, for a new trial (D.I. 309); (2) Pylon’s renewed motion for JMOL concerning the non-infringement of claims 1, 5 and 13 of the ‘434 patent (D.I. 316); (3) Pylon’s renewed motion for JMOL or, in the alternative, motion to amend or alter the judgment concerning the invalidity of claim 13 of the ‘434 patent (D.I. 318); (4) Pylon’s renewed motion for JMOL or, in the alternative, for a new trial regarding the invalidity of the ‘905 patent (D.I. 320); (5) Bosch’s motion for leave to file a sur-reply in opposition to Pylon’s motion for JMOL or, in the alternative, motion for a new trial regarding the invalidity of the ‘905 patent (D.I. 351); and (6) Bosch’s motion for a permanent injunction (D.I. 311).

II. BACKGROUND¹

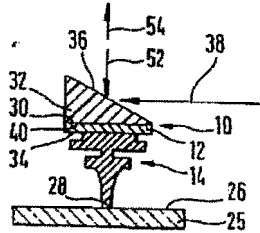
A. Patents in Suit

This case involves the refinement of several aspects of beam blade technology found in the Bosch patents, resulting in wiper blades that allow for better performance, visibility and safety on the road. The '974 patent, entitled "Glass Wiper Blade For Motor Vehicles," teaches a beam blade that prevents "lift-off" issues by deflecting wind up and over the blade through the use of a flexible spoiler on top of the support element. This deflection counteracts any "lift-off" tendency by creating additional downward force along the length of the wiper blade at higher speeds. ('974 patent at col. 1:58-2:3, 2:11-15) Claim 1, which is representative of the invention of the '974 patent, claims

[a] wiper blade for windows of motor vehicles, comprising a curved, band-shaped, spring-elastic support element which distributes a pressure applied by a wiper arm and has a concave and a convex surface which defines corresponding planes; an elongated rubber-elastic wiper strip placeable on a window to be wiped and mounted to said concave surface of said support element which faces the window, substantially longitudinally parallel to said concave surface; a connection device provided for a wiper arm and arranged directly on a convex side of said support element; and a component which is separate from said wiper strip and is mounted directly to the convex surface of said support element so as to form a leading-edge face extending in a longitudinal direction of the support element and forming, as seen crosswise to its longitudinal extension, an acute angle with a plane which extends parallel to a plane formed by said convex surface.

(*Id.* at col. 4:16-32) Figure 3 of the '974 patent discloses the cross section of an exemplary wiper blade:

¹This court's previous opinion on summary judgment, *Robert Bosch, LLC v. Pylon Mfg. Corp.*, 700 F. Supp. 2d 625 (D. Del. 2010), provides a detailed description of the activities leading up to the filing of the Bosch patents and the nature of the Pylon products accused of infringing the Bosch patents ("Accused Pylon Products"). (D.I. 291 at 7-13)



The subject matter of the '434 patent, entitled "Wiper Blade For The Glass Surfaces Of Motor Vehicles With An Elongated, Spring-Elastic Support Element," addresses innovations with respect to wiper blade end caps. End caps serve a safety function, preventing injury to those who handle the wiper blades by covering the often sharp ends of the support element. ('434 patent at col. 1:63-65) However, end caps can adversely affect the elasticity of the spring element which, in turn, disrupts the wiper strip's even distribution of pressure upon the windshield. (*Id.* at col. 1:46-50) The '434 patent discloses end caps that are used to maintain the integrity of the wiper blade without adversely affecting the elasticity of the beam. (*Id.*) Claim 1 claims

[a] wiper blade for windows or other glass of motor vehicles, having an elongated, spring-elastic support element, on whose side toward the window or glass an elongated, rubber-elastic wiper strip that can be placed against the window or glass is located parallel to the longitudinal axis, and on the side of the support element remote from the window or glass, in the middle portion of the support element, a device for attaching a driven wiper arm is disposed, the two ends of the wiper blade each being covered by a respective termination part in the region of the support element, characterized in that the termination part has a base body, located on the side of the support element remote from the window and bracing itself on the wiper blade, which base body is provided with hook-like extensions that cross the support element on both of its long sides and engage the side of the support element toward the window from behind; that at least one detent shoulder pointing toward the other end portion is disposed on each of the two end portions of the support element, and a counterpart shoulder present on the termination part is associated with the detent shoulder; and that at least one

of the two shoulders and/or at least one of the two extensions is elastically deflectable.

(*Id.* at col. 7:41-65)

The '905 patent is entitled "Wiper Blade For Cleaning Screens In Particular On Motor Vehicles." Although existing separately from the '974 patent family, the '905 patent discloses the structure of a spoiler that could be used in conjunction with the invention of the '974 patent. The spoiler taught by the '905 patent includes two diverging legs, with an attack surface embodied on the outside of one leg, allowing for a reduction in both weight and material costs. ('905 patent at col. 1:55-64) The '905 patent also describes wiper blades that incorporate end caps. (*Id.* at col. 7:60-8:21)

Claim 13 of the '905 patent, which is at issue in this case, reads:

13. A wiper blade for cleaning windows, comprising:

a band-like, elongated, spring-elastic support element, wherein a lower band surface oriented toward the window has an elongated, rubber-elastic wiper strip, which can be placed against the window, disposed on it so that the longitudinal axes of these two parts are parallel and wherein an upper band surface of the support element has a wind deflection strip disposed on it, wherein the wind deflection strip extends in a longitudinal direction of the support element, is provided with an attack surface oriented toward the main flow of the relative wind, and is made of an elastic material, wherein the wind deflection strip has two diverging legs, viewed in transverse cross section, wherein the two diverging legs are connected to each other at a common base and wherein free ends of the two diverging legs oriented toward the window are supported on the support element, and the attack surface is embodied on the outside of the one leg, wherein the upper band surface of the support element, in its middle section, includes a wiper blade part for connecting the wiper blade to a reciprocally driven wiper arm and is supported, wherein an end cap is respectively disposed at both ends of the support element, and wherein a section of the wind deflection strip is disposed between and in contact with each respective end cap and the device piece.

(*Id.* at col. 7:60-8:21)

B. Litigation History

Bosch filed this patent infringement action against Pylon on August 25, 2008, alleging that Pylon infringed certain claims of various wiper blade patents owned by Bosch. Following discovery, on November 12, 2009, Bosch moved for summary judgment of infringement of the '974 patent (D.I. 169), non-infringement of Pylon's U.S. Patent No. 6,640,380 ("the '380 patent") (D.I. 171), and no inequitable conduct and no invalidity for derivation of the '974 patent, the '905 patent and the '434 patent (D.I. 173). On the same date, Pylon moved for summary judgment of non-infringement and invalidity of four patents owned by Bosch. (D.I. 177)

The court granted in part and denied in part the parties' motions for summary judgment on March 30, 2010.² (D.I. 271) Specifically, the court: (1) granted Bosch's motion for summary judgment of infringement of the '974 patent with respect to claims 1 and 8 and denied summary judgment with respect to claim 2; (2) granted Bosch's motion for summary judgment of non-infringement of the '380 patent; (3) granted Bosch's motion for summary judgment of no inequitable conduct and no invalidity for derivation with respect to the '905 and '434 patents and denied summary judgment with respect to the '974 patent; (4) granted Pylon's motion for summary judgment of non-infringement of U.S. Patent No. 6,978,512 ("the '512 patent"); (5) denied Pylon's motion for summary judgment of non-infringement of the '974, '905 and '434 patents; (6) denied Pylon's motion for summary judgment that the '974 and '512 patents were invalid as anticipated or obvious; and (7) denied as moot Bosch's motion to strike the

²An amended memorandum opinion regarding the parties' motions for summary judgment issued on April 12, 2010. (D.I. 291)

expert report of Pylon's expert, Franz Buechele ("Buechele"). On the same date, the court issued its claim construction opinion. (D.I. 270)³

On April 12, 2010, the court entered an order granting in part and denying in part the parties' motions in limine. (D.I. 290) The court's order precluded Bosch from offering the post-discovery opinions of its expert, Steven Dubowsky ("Dubowsky"), which equate "bracing the wiper blade," as claimed by the '434 patent, with "touching" the support element and the wiper strip. (*Id.* at ¶ 1) The court found Dubowsky's post-discovery theory to be inconsistent with the specification of the '434 patent, both parties' proffered claim constructions, and the construction adopted by the court. (*Id.*) The court also granted in part Bosch's motions in limine to limit the prior art references that Pylon could rely on as invalidating prior art. (*Id.* at ¶ 2) A list attached to the court's order specifies the precise prior art patents and patent combinations on which the parties were permitted to present evidence at trial. (D.I. 290, Ex. A) In reaching its conclusion on the admissibility of invalidating prior art combinations, the court reviewed Pylon's expert report and assessed how much information the jury could appropriately and realistically assess. (3/30/10 Tr. at 35:7-11) The jury verdict sheet, which was agreed to by the parties, further reduced the number of prior art patents on which the jury could base its verdict, although the verdict sheet failed to provide the same level of specificity regarding permissible combinations of prior art patents. (D.I. 299)

A jury trial was held between April 15 and April 23, 2010. At trial, Bosch claimed that Pylon infringed the '434 patent and the '905 patent, and Pylon challenged the

³The court's claim construction opinion may be found at *Robert Bosch, LLC v. Pylon Mfg. Corp.*, 2010 WL 1417874 (D. Del. Mar. 30, 2010).

validity of the '974 patent, the '434 patent and the '905 patent.

C. The Jury Verdict

On April 23, 2010, the jury found that claims 1 and 8 of the '974 patent were invalid on two grounds: (1) obviousness in view of the prior art; and (2) derivation from Johannes Fehrsen ("Fehrsen"). (D.I. 299 at 1-2) The jury also determined that claims 1 and 5 of the '434 patent were invalid for obviousness in light of the prior art, but claims 7 and 13 of the '434 patent and claim 13 of the '905 patent were valid. (*Id.* at 3) Furthermore, the jury found that Pylon infringed claims 1, 5 and 13 of the '434 patent and claim 13 of the '905 patent (*Id.* at 4), but did not infringe claim 7 of the '434 patent (*Id.* at 2). The parties filed their post-trial motions on May 26, 2010.

III. DISCUSSION

A. Motion for Judgment as a Matter of Law

To prevail on a renewed motion for judgment as a matter of law ("JMOL"), following a jury verdict under Federal Rule of Civil Procedure 50(b), the moving party "must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied [by] the jury's verdict cannot in law be supported by those findings." *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1348 (Fed. Cir. 1998) (quoting *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 893 (Fed. Cir. 1984)) (internal quotations omitted). "'Substantial' evidence is such relevant evidence from the record taken as a whole as might be accepted by a reasonable mind as adequate to support the finding under review." *Perkin-Elmer Corp.*, 732 F.2d at 893. In assessing the sufficiency of the evidence, the court must give the

non-moving party, “as [the] verdict winner, the benefit of all logical inferences that could be drawn from the evidence presented, resolve all conflicts in the evidence in his favor, and in general, view the record in the light most favorable to him.” *Williamson v. Consol. Rail Corp.*, 926 F.2d 1344, 1348 (3d Cir. 1991); *Perkin-Elmer Corp.*, 732 F.2d at 893. The court may not determine the credibility of the witnesses or “substitute its choice for that of the jury between conflicting elements of the evidence.” *Id.* In sum, the court must determine whether the evidence reasonably supports the jury's verdict. See *Dawn Equip. Co. v. Kentucky Farms Inc.*, 140 F.3d 1009, 1014 (Fed. Cir. 1998).

1. Invalidity

The burden of proof to establish the invalidity of a patent is “clear and convincing evidence.” *Golden Blount, Inc. v. Robert H. Peterson Co.*, 365 F.3d 1054, 1058 (Fed. Cir. 2004). In conjunction with this burden, the Federal Circuit has explained that,

[w]hen no prior art other than that which was considered by the PTO examiner is relied on by the attacker, he has the added burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job, which includes one or more examiners who are assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill in the art and whose duty it is to issue only valid patents.

PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1304 (Fed. Cir. 2008) (quoting *Am. Hoist & Derrick Co. v. Sowa & Sons*, 725 F.2d 1350, 1359 (Fed. Cir. 1984)).

a. Obviousness

“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.” 35 U.S.C. § 103(a). Obviousness is a question of law, which

depends on several underlying factual inquiries.

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406, 127 S. Ct. 1727, 167 L. Ed. 2d 705 (2007) (quoting *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966)). “Because patents are presumed to be valid, see 35 U.S.C. § 282, an alleged infringer seeking to invalidate a patent on obviousness grounds must establish its obviousness by facts supported by clear and convincing evidence.” *Kao Corp. v. Unilever U.S., Inc.*, 441 F.3d 963, 968 (Fed. Cir. 2006) (citation omitted).

“[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR*, 550 U.S. at 418. A defendant asserting obviousness in view of a combination of references has the burden to show, by clear and convincing evidence, that a person of ordinary skill in the relevant field had a reason to combine the elements in the manner claimed. *Id.* at 418-19. The Supreme Court has emphasized the need for courts to value “common sense” over “rigid preventative rules” in determining whether a motivation to combine existed. *Id.* at 419-20. “[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* at 420. However, in determining what would have been obvious to one of ordinary skill in the art at the time

of invention, the use of hindsight is not permitted. See *id.* at 421.

Although an expert is not the only source for evidence that it would be obvious for one skilled in the art to combine references to reach the claimed product, “some kind of motivation must be shown from some source, so that the jury can understand why a person of ordinary skill would have thought of either combining two or more references or modifying one to achieve the patented [product].” *Innogenetics, N.V. v. Abbott Laboratories*, 512 F.3d 1363, 1374 (Fed. Cir. 2008) (quoting *Innogenetics, N.V. v. Abbott Laboratories*, 578 F. Supp. 2d 1079, 1086 (W.D. Wis. 2007)). “[T]he motivation to modify a reference can come from the knowledge of those skilled in the art, from the prior art reference itself, or from the nature of the problem to be solved.” *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1356-57 (Fed. Cir. 2000) (citing *In re Rouffet*, 149 F.3d 1350, 1358 (Fed. Cir. 1998)). In addition to showing that a person of ordinary skill in the art would have had reason to attempt to make the composition or device, or carry out the claimed process, a defendant must also demonstrate, by clear and convincing evidence, that “such a person would have had a reasonable expectation of success in doing so.” *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1360 (Fed. Cir. 2007).

(1) '974 patent

Pursuant to the court’s in limine order, Pylon presented evidence to show the obviousness of the '974 patent in light of prior art U.S. Patent No. 5,325,564 (“the '564 patent”) in combination with one of several other prior art patents. These additional patents included, among others, U.S. Patent Nos. 3,879,793 (“the '793 patent”) and

3,881,214 (“the ‘214 patent”). The court’s in limine order, viewed in light of the options available on the jury’s verdict sheet, precluded a finding of obviousness based on any single prior art reference and any combination of prior art references that did not include the ‘564 patent. However, the jury checked boxes on its verdict sheet indicating that claim 1 of the ‘974 patent was obvious in light of the ‘793 patent and/or the ‘214 patent and claim 8 of the ‘974 patent was obvious in light of the ‘214 patent, failing to indicate obviousness in light of the ‘564 patent on either claim 1 or claim 8 of the ‘974 patent. (D.I. 299 at ¶ 1)

In support of its motion for JMOL, Bosch argues that the jury’s verdict cannot be based on substantial evidence because the court’s in limine order barred Pylon from arguing the invalidity of claims 1 and 8 of the ‘974 patent for obviousness based on the ‘793 patent and the ‘214 patent, either alone or in combination with each other. (D.I. 310 at 19-20) Even if Pylon were permitted to present evidence of obviousness based only on the ‘793 patent and/or the ‘214 patent, Bosch contends that the prior art references, either alone or in combination with each other, do not describe a wiper blade featuring each limitation of the ‘974 patent. (*Id.* at 22) Moreover, Bosch contends that deference should be given to the validity of the ‘974 patent because both the ‘793 patent and the ‘214 patent were considered by the United States Patent and Trademark Office (“USPTO”) during the prosecution of the ‘974 patent. (*Id.*)

In response, Pylon argues that the verdict sheet did not place any limitations on finding claims 1 and 8 of the ‘974 patent obvious in light of the ‘793 patent and/or the ‘214 patent. (D.I. 330 at 18) Contrary to Bosch’s contention, Pylon maintains that the ‘214 patent and the ‘793 patent contain features that can be associated with each

limitation of the '974 patent. (*Id.* at 19) According to Pylon, the beam blade does not constitute a "missing element" because its features were well-known in the art at the time of the invention, and the '974 patent is designed to counteract wind lift problems experienced on all wiper blades, not just beam blades. (*Id.* at 19-20) Pylon also points to the testimony of Bosch's expert, who conceded that one of ordinary skill in the art would understand from the teachings of the '793 patent that a triangular shape having an inclined ramp counteracts wind lift regardless of whether the spoiler is on a beam blade or a bracketed blade. (*Id.* at 23) Pylon also relies on the testimony of its own expert regarding known wind lift problems to demonstrate a motivation to combine the '793 and '214 patents and show that a person of ordinary skill in the art could ascertain a common sense solution to this problem by using triangular shapes on top of the wiper blades without any unexpected results. (*Id.* at 24)

After reviewing the evidence presented at trial in the light most favorable to Pylon as the verdict winner, the court concludes that the jury's obviousness verdict with respect to claims 1 and 8 of the '974 patent was not based on substantial evidence. The court's in limine order precluded Pylon from presenting evidence in support of the invalidity of the '974 patent based on the '793 patent and/or the '214 patent in the absence of the '564 patent, and Pylon does not dispute that it complied with the court's order. As a result, no expert testimony supports the theory that one of ordinary skill in the art would be motivated to place a spoiler on top of a beam blade to reduce wind lift based on the teachings of the '793 patent and/or the '214 patent. Although the jury's verdict sheet did not preclude the jury from reaching its finding, Pylon was responsible for presenting its evidence to the jury in a manner that would allow the jury to find by

clear and convincing evidence that the Bosch patents were invalid. Given that no evidence was presented at trial on the invalidity of the '974 patent in light of the '793 patent and the '214 patent, either alone or in combination with each other, the court concludes that the jury did not have substantial evidence to determine that claims 1 and 8 of the '974 patent were invalid for obviousness.

(2) '434 patent

Pursuant to the court's in limine order, Pylon presented evidence to show the obviousness of claims 1, 5 and 13 of the '434 patent in light of the '564 patent in combination with one of several other prior art patents. These additional patents included, among others, U.S. Patent Nos. 3,083,394 ("the '394 patent") and 3,116,507 ("the '507 patent"). The court's in limine order, viewed in light of the options available on the jury's verdict sheet, precluded a finding of obviousness based on any single prior art reference or any combination of prior art references that did not include the '564 patent. The jury checked boxes on its verdict sheet indicating that claims 1 and 5 of the '434 patent were obvious in light of the '394 patent and/or the '507 patent, but the jury failed to indicate obviousness in light of the '564 patent on either claim 1 or claim 5 of the '434 patent. (D.I. 299 at ¶ 4) The jury further found that claim 13 of the '434 patent was valid. (*Id.*)

(a) Claims 1 and 5

In support of its motion for JMOL regarding the non-obviousness of the '434 patent, Bosch again argues that the court's in limine order barred Pylon from arguing obviousness based on the '394 patent and the '507 patent, either alone or in

combination with each other. (D.I. 310 at 25) Furthermore, Bosch contends that the '394 and '507 patents are interchangeable and do not support a claim for obviousness because they fail to describe the beam blade, connection device and end cap described in the '434 patent. (*Id.* at 26) Bosch also maintains that deference should be given to the validity of the '434 patent because the type of technology described in the '394 patent and the '507 patent was considered by the USPTO during the prosecution of the '434 patent. (*Id.* at 24)

Pylon responds that the limitations allegedly missing from the prior art cited by the jury were already part of the relevant prior art at the time of the patent, and a separate reference for those limitations was not necessary given the limitations that are expressly disclosed in the '394 and '507 patents. (D.I. 330 at 27) In particular, Pylon notes that its expert revealed a termination part "supporting itself on **both** the support element and the wiper strip" in both the '394 patent and the '507 patent in accordance with the court's construction.⁴ (*Id.* at 28) According to Pylon, the advantages provided by the '434 patent over the prior art were available prior to the filing of the '434 patent, and a person of ordinary skill in the art would not expect a safety feature such as an end cap to provide an unexpected result. (*Id.* at 30) Furthermore, Pylon's expert maintained that the use of an end cap on one end of the wiper blade renders obvious the use of an end cap on the other end. (*Id.* at 28)

After reviewing the evidence presented at trial in the light most favorable to Pylon as the verdict winner, the court concludes that the jury's obviousness verdict with

⁴The court construed "bracing itself on the wiper blade" to mean "supporting itself on both the support element and the wiper strip." (D.I. 270 at 5)

respect to claims 1 and 5 of the '434 patent was not based on substantial evidence. The court's in limine order precluded Pylon from presenting evidence in support of the invalidity of the '434 patent based on the '394 patent and/or the '507 patent in the absence of the '564 patent, and Pylon complied with the court's order. As a result, no expert testimony supports the theory that one of ordinary skill in the art would be motivated to place end caps that brace themselves on the wiper blade on both ends of the blade based on the teachings of the '394 patent and/or the '507 patent. Although the jury's verdict sheet did not preclude the jury from reaching its finding, Pylon was responsible for presenting its evidence to the jury in a manner that would allow the jury to find by clear and convincing evidence that the Bosch patents were invalid. Given that no evidence was presented at trial on the invalidity of the '434 patent in light of the '394 patent and the '507 patent, either alone or in combination with each other, the court concludes that the jury did not have substantial evidence to determine that claims 1 and 5 of the '434 patent were invalid for obviousness.

(b) Claim 13

In its renewed motion for JMOL, Pylon contends that the jury erred in concluding that claim 13 of the '434 patent was valid because the prior art expressly discloses the plastic end cap contained in claim 13 of the '434 patent. (D.I. 319 at 4) Specifically, Pylon contends that the additional plastic end cap limitation in claim 13 of the '434 patent is comparable to the one described in the '507 prior art patent cited by the jury in finding claim 1 of the '434 patent obvious. (*Id.*) Pylon further observes that Bosch's expert failed to contest the teaching of plastic end caps in the prior art. (*Id.* at 7)

In response, Bosch urges the court to grant its motion for JMOL and find claim 1 valid but, regardless of the court's conclusion on the validity of claim 1 of the '434 patent, Bosch contends that the court should not grant Pylon's motion for JMOL on claim 13 because a reasonable jury could have found that claim 13 of the '434 patent was valid. (D.I. 334 at 4-6) Bosch maintains that, while claim 1 does not require the end cap to be "elastically deflectable," claim 13 describes an end cap that must be made of elastic plastic. In this regard, the only evidence Pylon produced at trial in support of its argument was the '507 patent, which does not specify that the end cap is elastically deflectable. (*Id.* at 7-8) Bosch further argues that the prior art cited by the jury fails to disclose all of the relevant limitations of claim 13 of the '434 patent, and Pylon failed to present admissible evidence of a motivation to combine those references by one of ordinary skill in the art. (*Id.* at 12-13) In addition, Bosch claims that its evidence of secondary factors such as the commercial success of the wiper blades and the long-felt need in the industry for the features embodied in claim 13 of the '434 patent further bolsters its contention that the court should uphold the jury verdict regarding the validity of claim 13. (*Id.* at 13-16)

After reviewing the evidence presented at trial in the light most favorable to Bosch as the verdict winner, the court concludes that the jury's non-obviousness verdict with respect to claim 13 of the '434 patent was based on substantial evidence. Although the jury was not required to specify which evidence it relied upon or rejected in reaching its verdict, for purposes of responding to the issues raised by Pylon's motion for JMOL, the court concludes that sufficient evidence existed from which a reasonable jury could find claim 13 of the '434 patent valid. Even assuming the court were to

uphold the jury's finding of obviousness on claim 1 of the '434 patent, claim 13 contains an additional limitation. The jury could reasonably conclude that the prior art references cited by Pylon failed to meet the teachings of claim 13 of the '434 patent, particularly with respect to the elastic plastic material specified by claim 13 which is not clearly present in the prior art presented by Pylon at trial. Furthermore, Pylon presented little to no evidence of a motivation to combine elements of the prior art to achieve the '434 patent. Pylon had the burden of proving the obviousness of claim 13 of the '434 patent by clear and convincing evidence, and the court cannot substitute its own judgment for the jury's where conflicting elements of evidence are present. Given that substantial evidence was presented at trial on the validity of claim 13 the '434 patent, the court upholds the jury's conclusion that claim 13 of the '434 patent is valid.

(3) '905 patent

The jury concluded that claim 13 of the '905 patent was not obvious in light of U.S. Patent No. 6,279,191 ("the '191 patent") and British Patent GB 2,106,775 ("the '775 patent"). In its motion for JMOL, Pylon argues that no reasonable jury could conclude that claim 13 of the '905 patent is valid because expert testimony showed that the prior art references were nearly identical to claim 13 of the '905 patent. (D.I. 321 at 9) According to Pylon, the prior art of record expressly discloses physical contact between the spoiler of a beam blade and either the device piece or the end caps, and Pylon's expert testified that one of ordinary skill in the art would have been motivated to combine the features of the '191 patent and the '775 patent because a hollow spoiler offers cost and production advantages. (*Id.* at 9-10)

Bosch responds that the jury verdict should be upheld because Pylon did not

disclose each and every limitation of claim 13 of the '905 patent in the prior art references. (D.I. 335 at 4) Specifically, Bosch contends that the '905 patent requires contact between the spoiler, both end caps, and the device piece, and the prior art presented by Pylon did not meet those requirements due to a space between the end caps and the spoiler as well as a space between the device piece and the spoiler. (*Id.* at 5) Bosch maintains that the jury could have credited Dubowsky's testimony regarding the absence of a motivation by one of ordinary skill in the art to eliminate the gaps between the spoiler and the device piece or the spoiler and the end caps in the '191 patent, whereas Buechele's testimony regarding a motivation to combine the '191 patent with the '775 patent falls outside the scope of his expert report. (*Id.* at 10, 17) Moreover, Bosch maintains that secondary considerations regarding the commercial success of wiper blades embodying claim 13 of the '905 patent further support the jury's verdict regarding the validity of claim 13 of the '905 patent. (*Id.* at 18)

After reviewing the evidence presented at trial in the light most favorable to Bosch as the verdict winner, the court concludes that the jury's non-obviousness verdict with respect to claim 13 of the '905 patent was based on substantial evidence. Although the jury was not required to specify which evidence it relied upon or rejected in reaching its verdict, for purposes of responding to the issues raised by Pylon's motion for JMOL, the court concludes that sufficient evidence existed from which a reasonable jury could find claim 13 of the '905 patent valid. The jury could reasonably conclude that the prior art references cited by Pylon failed to meet the teachings of claim 13 of the '905 patent, particularly with respect to the required contact between the spoiler, the device piece and the end caps specified by claim 13. Although the court does not

dispute that Pylon presented expert testimony in support of its obviousness argument, the jury was charged with making credibility determinations regarding the expert witnesses. Pylon had the burden of proving the obviousness of claim 13 of the '905 patent by clear and convincing evidence, and the court cannot substitute its own judgment for the jury's where conflicting elements of evidence are present. Given that substantial evidence was presented at trial on the validity of claim 13 the '905 patent, the court upholds the jury's conclusion that claim 13 of the '905 patent is valid.

b. Derivation of the '974 patent

At trial, Pylon claimed that the '974 patent was invalid under 35 U.S.C. § 102(f), which states: "A person shall be entitled to a patent unless . . . he did not himself invent the subject matter sought to be patented." Assertion of this subsection as a defense amounts to a claim that the patentee derived the invention from another. *See Price v. Symsek*, 988 F.2d 1187, 1190 (Fed. Cir. 1993). A party bringing a claim for patent invalidity under 35 U.S.C. § 102(f) must demonstrate, by clear and convincing evidence, both conception of the invention by another and communication of the invention to the patentee. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1576 (Fed. Cir. 1997) (citing *Price*, 988 F.2d at 1190).

Conception is the "formation in the inventor's mind of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376 (Fed. Cir. 1986) (citations omitted). A conception must encompass all limitations of the claimed invention, and "is complete only when the idea is so clearly defined in the inventor's

mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation.” *Singh v. Brake*, 317 F.3d 1334, 1340 (Fed. Cir. 2002) (citations omitted). Put differently, every limitation must be shown to have been known to the inventor at the time the invention is alleged to have been conceived. *Davis v. Reddy*, 620 F.2d 885, 889 (C.C.P.A. 1980) (citing *Schur v. Muller*, 372 F.2d 546, 551 (1967); *Anderson v. Anderson*, 403 F. Supp. 834, 846 (D. D.C. 1975)).

Upon the issuance of a patent, it is presumed that there are no inventors other than those listed on the patent. *Bd. of Educ. v. Am. Bioscience, Inc.*, 333 F.3d 1330, 1337 (Fed. Cir. 2003). A party challenging this presumption must prove, by clear and convincing evidence, that it significantly contributed to the conception of the invention. *Id.* An inventor’s testimony stating that he contributed to the conception at issue is not, by itself, enough to support a finding of inventorship. Such testimony must be corroborated by either contemporaneous documents, testimony of someone else or circumstantial evidence. *Ethicon, Inc. v. United States Surgical Corp.*, 135 F.3d 1456, 1461 (Fed. Cir. 1998). “Circumstantial evidence about the inventive process may also corroborate” the inventor’s testimony. *Id.* (citing *Knorr v. Pearson*, 671 F.2d 1368).

Factors to be considered in assessing corroboration include:

- (1) the relationship between the corroborating witness and the alleged prior user;
- (2) the time period between the event and trial;
- (3) the interest of the corroborating witness in the subject matter in suit;
- (4) contradiction or impeachment of the witness’ testimony;
- (5) the extent and details of the corroborating testimony;
- (6) the witness’ familiarity with the subject matter of the patented invention and the prior use;
- (7) probability that a prior use could occur considering the state of the art at the time;
- (8) impact of the invention on the industry, and the commercial value of its practice.

Woodland Trust v. Flowertree Nursery, 148 F.3d 1368, 1371 (Fed. Cir. 1998).

“Whether the inventor’s testimony has been sufficiently corroborated is evaluated under a ‘rule of reason analysis,’” which requires that “an evaluation of all pertinent evidence must be made so that a sound determination of the credibility of the alleged inventor’s story may be reached.” *Ethicon*, 135 F.3d at 1461 (quoting *Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993)).

The standard for finding communication of a prior conception requires “communication of a complete conception . . . sufficient to **enable** one of ordinary skill in the art to construct and successfully operate the invention.” *Gambro Lundia*, 110 F.3d at 1577 (quoting *Hedgewick v. Akers*, 497 F.2d 905, 908, 182 U.S.P.Q. 167, 169 (C.C.P.A. 1974)). Communication of the conception to the patentee may be made by either public knowledge or private communications, and must be sufficient to enable one skilled in the art to make the patented invention. *Cordance Corp. v. Amazon.com, Inc.*, 687 F. Supp. 2d 449, 479 (D. Del. 2010).

(1) Claim 8

In its renewed motion for JMOL, Bosch alleges that the jury’s finding that Bosch derived claim 8 of the ‘974 patent from Fehrsen is not supported by substantial evidence because Pylon failed to prove Fehrsen’s conception of claim 8, which states “wherein said leading-edge face extends at least nearly over an entire length of the wiper blade.” (D.I. 310 at 6) Bosch contends that Fehrsen did not testify about this limitation at trial, and Adriaan Swanepoel (“Swanepoel”), a South African engineer who worked with Fehrsen on wiper blade technology, testified that he could “not recall any

discussion on the lengthwise extent of such a spoiler.” (*Id.*) Pylon responds that Swanepoel conceived of the spoiler contained in claim 8 in a 1991 memorandum, and this spoiler served as the starting point for Fehrsen’s ideas to mount an elastic spoiler on the convex surface of a beam blade. (D.I. 330 at 3) Based on Swanepoel’s testimony and Fehrsen’s notes from the September 1992 meeting, Pylon contends that it was readily understood that the length of the spoiler would depend on necessity and that the spoiler had a continuous profile across the blade. (*Id.* at 3-4) Pylon also maintains that claim 8 of the ‘974 patent does not add any patentably distinct subject matter and was well-known in the art at the time of Fehrsen’s conception. (*Id.* at 4)

After reviewing the evidence presented at trial in the light most favorable to Pylon as the verdict winner, the court concludes that the jury’s derivation verdict regarding claim 8 of the ‘974 patent was not based on substantial evidence. If anything, Swanepoel’s 1991 memorandum supports a finding that claim 8 of the ‘974 patent was derived from Swanepoel rather than Fehrsen. However, the jury declined to accept the theory that claim 8 of the ‘974 patent was derived from Swanepoel after reviewing the evidence. Pylon’s contention that the 1991 memorandum served as the “starting point” for Fehrsen’s allegedly derived concept is conclusory and lacks evidentiary support to show how Swanepoel’s conception differs from Fehrsen’s conception and/or the claim 8 limitation of the ‘974 patent.

The court concludes that Fehrsen’s 1992 meeting notes also fail to support the jury’s derivation finding because they show only a cross-section of the wiper blade and give no indication of whether the leading edge face extends at least nearly over the entire length of the blade as specified in claim 8. Swanepoel’s testimony does nothing

to fill the gaps in Fehrsen's notes because he testified that he recalled no discussion regarding the length of the leading edge face of the spoiler. Furthermore, evidence that claim 8 was well-known in the prior art has no bearing on a derivation analysis. Given that no evidence presented at trial illustrated the length of the leading edge face as described in claim 8 of the '974 patent, the court concludes that the jury did not have substantial evidence to determine that claim 8 was invalid as derived from Fehrsen.

(2) Claim 1

Bosch alleges that the jury's derivation verdict on claim 1 of the '974 patent is erroneous because Pylon did not sufficiently corroborate Fehrsen's testimony regarding his conception of claim 1 of the '974 patent. (D.I. 310 at 9) Specifically, Bosch claims that Swanepoel's testimony is insufficient corroboration as a matter of law because Swanepoel is an interested witness and possible co-inventor who receives royalties from a Bosch competitor and whose testimony was enhanced by his preparation by Pylon's attorneys. (*Id.* at 9-10) According to Bosch, Fehrsen's meeting notes likewise give no indication of whether Fehrsen originated the ideas contained in his sketches or whether he made notations on ideas that were presented by Bosch at the September 1992 meeting. (*Id.* at 8) Furthermore, Bosch maintains that the testimony of Wilfried Merkel ("Merkel"), a named inventor of the '974 patent, regarding his communication of claim 1 at the September 1992 meeting must be credited because Swanepoel did not attend the meeting where the invention of claim 1 was allegedly communicated and testified that he did not "have any idea what happened at the meeting." (*Id.* at 7)

Pylon responds that Swanepoel is not an interested witness and his testimony

provided sufficient corroboration of the conception of claim 1 by Fehrsen, particularly in combination with Fehrsen's testimony, Fehrsen's notes and circumstantial evidence. (D.I. 330 at 10-11) According to Pylon, it was within the province of the jury to credit Fehrsen's testimony regarding his communication of claim 1 of the '974 patent over Merkel's conflicting testimony. (*Id.* at 6) In addition, Pylon contends that Swanepoel's testimony, Fehrsen's meeting notes, and several circumstantial factors directly support Fehrsen's testimony that Fehrsen communicated the idea for claim 1 of the '974 patent to Bosch at the September 1992 meeting. (*Id.*)

After reviewing the evidence presented at trial in the light most favorable to Pylon as the verdict winner, the court concludes that the jury's derivation verdict regarding claim 1 of the '974 patent was based on substantial evidence. Although the court acknowledges that Fehrsen's testimony alone is not enough to support a claim for derivation, the court finds that Swanepoel's testimony corroborates Fehrsen's testimony of the conception of claim 1 of the '974 patent, and it was within the province of the jury to assess Swanepoel's credibility as a witness. The court agrees that Swanepoel's testimony regarding the September 1992 meeting is not conclusive because he did not attend the meeting, but this does not mean that the jury was required to credit Merkel's testimony instead. Furthermore, while Fehrsen's meeting notes do not clarify who originated the conceptions embodied in his sketches, the jury determined that Fehrsen originated the ideas after a review of the notes in combination with circumstantial factors. Fehrsen's testimony, his meeting notes and various circumstantial factors support not only his conception of claim 1 of the '974 patent, but also his communication of that conception at the September 1992 meeting. Given that

substantial evidence was presented at trial regarding the derivation of claim 1 of the '974 patent from Fehrsen, the court upholds the jury's conclusion that claim 1 of the '974 patent is invalid for derivation.

2. Infringement

A patent is infringed when a person “without authority makes, uses or sells any patented invention, within the United States . . . during the term of the patent.” 35 U.S.C. § 271(a). A two-step analysis is employed in making an infringement determination. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995). First, the court must construe the asserted claims to ascertain their meaning and scope. See *id.* Construction of the claims is a question of law subject to de novo review. See *Cybor Corp. v. FAS Techs.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998). The trier of fact must then compare the properly construed claims with the accused infringing product. See *Markman*, 52 F.3d at 976. This second step is a question of fact. See *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998).

“Direct infringement requires a party to perform each and every step or element of a claimed method or product.” *BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378 (Fed. Cir. 2007). “If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law.” *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000). If an accused product does not infringe an independent claim, it also does not infringe any claim depending thereon. See *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1553 (Fed. Cir. 1989). However, “[o]ne may infringe an independent claim and not infringe a claim dependent

on that claim.” *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007) (quoting *Wahpeton Canvas*, 870 F.2d at 1552) (internal quotations omitted). A product that does not literally infringe a patent claim may still infringe under the doctrine of equivalents if the differences between an individual limitation of the claimed invention and an element of the accused product are insubstantial. See *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 24, 117 S. Ct. 1040, 137 L. Ed. 2d 146 (1997). The patent owner has the burden of proving infringement and must meet its burden by a preponderance of the evidence. See *SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988) (citations omitted).

a. Claim 7 of the ‘434 patent

Bosch claims that the jury erred in finding that claim 7 of the ‘434 patent was not infringed by the Accused Pylon Products. Claim 7 describes a “detent shoulder . . . embodied on a detent tooth that protrudes from the long side of the support element.” (‘434 patent at col. 7:27-29) The court construed this limitation to mean “[a] protrusion, one surface of which defines a detent shoulder” and declined to import the angular structure requirement of the detent teeth depicted in figure 6 based on one embodiment. (D.I. 270 at ¶ 18) The court construed the “long sides” of the support element to mean the “longitudinal sides of the support element,” noting that the ‘434 patent distinguishes between the long sides and the long edges. (*Id.* at ¶ 16)

Specifically, the court stated:

Defendant argues that this construction would encompass “sides” that are not “long,” and instead proposes a construction with reference to the longitudinal “edge” of the support element. Irrespective of the court’s disagreement with the logic of this argument, the ‘434 patent distinguishes

between the long **sides** (claims 1, 4, 5, and 7) and the long **edges** (claim 11) of the support element.

(Id.)

According to Bosch, Pylon's only testimony in support of its argument for non-infringement of claim 7 impermissibly contradicted the court's claim construction order. (D.I. 310 at 32-33) Bosch contends that, while it presented evidence of infringement under the court's claim construction in the form of Dubowsky's expert testimony, Pylon's only non-infringement testimony was based on a rejected claim construction that the "long side" refers only to the outermost edge of the left and right sides. *(Id.)* Bosch claims that Pylon caused confusion by trying to distinguish the side and the edge in a manner contrary to the court's claim construction. (D.I. 341 at 27) In response, Pylon contends that a jury verdict finding infringement of claim 7 is not compelled by the court's construction of the terms in that claim, nor do the parties' experts' differing interpretations of the terms compel a judgment for Bosch. (D.I. 330 at 35) Pylon argues that the jury was entitled to credit the testimony of Pylon's expert over Bosch's expert, who presented a complicated theory that divided the surface of the support element into middle, left and right zones and was not supported by the figures of the '434 patent or any expert report. *(Id. at 36)* Pylon further contends that its defense did not contradict the court's claim construction order, and Pylon's expert explained how his understanding of the "long sides" of the support element was consistent with the '434 patent's description in figure 6. *(Id.)*

After reviewing the evidence presented at trial in the light most favorable to Pylon as the verdict winner, the court concludes that the jury's non-infringement verdict

regarding claim 7 of the '434 patent was based on substantial evidence. The court acknowledges that the testimony presented by Pylon strained the limits of the term "long side" as defined by the court's claim construction order. However, the court rejects Bosch's argument that Pylon's expert testimony rose to the level of violating the court's claim construction order. Bosch had the burden of proving the infringement of claim 7 of the '434 patent by a preponderance of the evidence, and the court cannot substitute its own judgment for the jury's where conflicting evidence is present. Given that Pylon presented substantial evidence in support of its claim of non-infringement of claim 7 of the '434 patent, the court denies Bosch's motion for JMOL with respect to the non-infringement of claim 7 of the '434 patent.

b. Claims 1, 5 and 13 of the '434 patent

In its renewed motion for JMOL, Pylon argues that no reasonable jury could have found that claims 1, 5 and 13 of the '434 patent were infringed based on the court's claim construction of the term "bracing itself on the wiper blade." (D.I. 317) The court construed "bracing itself on the wiper blade" to mean "supporting itself on both the support element and the wiper strip." (D.I. 270 at ¶ 11) The court further explained that "[a]lthough claim 1 refers to bracing on both wiper strip (20) and support element (16), the inventive nature of the '434 patent, illuminated by the intrinsic record, does not require that such bracing be simultaneous." (*Id.*)

Pylon contends that the Accused Pylon Products do not meet the requirements of the court's claim construction because they do not brace themselves on both the support element and the wiper strip. (D.I. 317 at 5) According to Pylon, both parties' experts agreed that the end caps in the Accused Pylon Products support themselves

only on the support element. (*Id.* at 6) Furthermore, Pylon maintains that evidence showing both the end cap and the wiper strip supported on the support element is not sufficient to demonstrate a functional relationship between the end cap and the wiper strip as required by the court's claim construction. (*Id.*) Bosch responds that Dubowsky's testimony (which tracks the court's claim construction, the jury instructions and the verdict) supports the theory that the end cap contained in the Accused Pylon Products was supported by both the wiper strip and the support element. (D.I. 333 at 3-4) According to Bosch, the physical exhibits of the Accused Pylon Products also show that the end caps in the infringing products support themselves on both the support element and the wiper strip. (*Id.* at 4) Furthermore, Bosch maintains that the court rejected Pylon's alternative claim construction and affirmed in the jury instructions that "bracing" does not require "touching" as long as a functional relationship exists between the end caps and the wiper strip. (*Id.* at 3)

After reviewing the evidence presented at trial in the light most favorable to Bosch as the verdict winner, the court concludes that the jury's infringement verdict regarding claims 1, 5 and 13 of the '434 patent was based on substantial evidence. The jury could find Dubowsky's testimony more credible and rely on its own conclusions concerning the Accused Pylon Products, and the court cannot substitute its own judgment for the jury's where, as here, conflicting evidence is present. Given that substantial evidence supported the jury's finding of infringement of claims 1, 5 and 13 of the '434 patent, the court denies Pylon's motion for JMOL with respect to the infringement of those claims.

B. Motion for a New Trial

The decision to grant or deny a new trial is within the sound discretion of the trial court and, unlike the standard for determining judgment as a matter of law, the court need not view the evidence in the light most favorable to the verdict winner. See *Allied Chem. Corp. v. Daiflon, Inc.*, 449 U.S. 33, 36 (1980). Federal Rule of Civil Procedure 59(a) provides, in pertinent part:

A new trial may be granted to all or any of the parties and on all or part of the issues in an action in which there has been a trial by jury, for any of the reasons for which new trials have heretofore been granted in actions at law in the courts of the United States.

New trials are commonly granted where: (1) the jury's verdict is against the clear weight of the evidence, and a new trial must be granted to prevent a miscarriage of justice; (2) newly-discovered evidence surfaces that would likely alter the outcome of the trial; (3) improper conduct by an attorney or the court unfairly influenced the verdict; or (4) the jury's verdict was facially inconsistent. See *Zarow-Smith v. N.J. Transit Rail Operations*, 953 F.Supp. 581, 584 (D.N.J.1997) (citations omitted). The court, however, must proceed cautiously and cannot substitute its own judgment of the facts and assessment of the witnesses' credibility for the jury's independent evaluation. Nevertheless,

[w]here a trial is long and complicated and deals with a subject matter not lying within the ordinary knowledge of jurors a verdict should be scrutinized more closely by the trial judge than is necessary where the litigation deals with material which is familiar and simple, the evidence relating to ordinary commercial practices. An example of subject matter unfamiliar to a layman would be a case requiring a jury to pass upon the nature of an alleged newly discovered organic compound in an infringement action.

Siemens Medical Solutions USA, Inc. v. Saint-Gobain Ceramics & Plastics, Inc., 615 F. Supp. 2d 304, 309-10 (D. Del. 2009) (quoting *Lind v. Schenley Indus. Inc.*, 278 F.2d 79, 90-91 (3d Cir.1960)). Pursuant to Fed. R. Civ. P. 50(c), if the court grants a renewed motion for JMOL, it must also conditionally rule on any motion for a new trial by determining whether a new trial should be granted if the judgment is later vacated or reversed. Fed. R. Civ. P. 50(c)(1).

1. Obviousness of the '974 patent and the '434 patent

Bosch argues that the jury's verdict of obviousness of claims 1 and 8 of the '974 patent and claims 1 and 5 of the '434 patent is against the weight of the evidence and warrants a new trial. (D.I. 310 at 27) Specifically, Bosch contends that its expert testified that the prior art patents did not embody every limitation of the claimed inventions, and Pylon presented no evidence of a motivation by one of ordinary skill in the art to combine the prior art patents to achieve the claimed invention. (*Id.* at 27-28) Furthermore, Bosch maintains that the prior art was either literally considered by the PTO or it was cumulative to other prior art considered by the PTO, and secondary factors such as the commercial success of the blades also support Bosch's claim for non-obviousness. (*Id.* at 28-30) Pylon counters that the jury was free to accept the opinions of its expert over Bosch's expert, and the evidence of secondary considerations presented by Bosch does not control the obviousness determination and was not adequately substantiated. (D.I. 330 at 32-33)

Pursuant to Fed. R. Civ. P. 50(c)(1), the court conditionally grants a new trial on the obviousness of claims 1 and 8 of the '974 patent and claims 1 and 5 of the '434

patent because the jury's verdict was against the clear weight of the evidence. Both parties presented evidence on prior art references upon which the jury could have reasonably based its verdict. However, the jury based its obviousness verdict on combinations of prior art not presented at trial by either party because they were precluded by the court's in limine order. As such, the jury's verdict goes against the clear weight of the evidence and, if this court's order granting Bosch's motion for JMOL is reversed on appeal, a new trial is warranted on the obviousness of claims 1 and 8 of the '974 patent and claims 1 and 5 of the '434 patent. Accordingly, Bosch's motion for a new trial on the obviousness of claims 1 and 8 of the '974 patent and claims 1 and 5 of the '434 patent is conditionally granted.

2. Derivation of the '974 patent

Bosch also argues that the jury's derivation finding is against the weight of the evidence taken as a whole and a new trial is warranted to prevent a miscarriage of justice. (D.I. 310 at 12) Bosch points to Merkel's testimony regarding the sketch pad on which he allegedly proposed the invention at the September 1992 meeting and to Swanepoel's lengthy manuals on beam-blade technology that did not mention the spoiler invention. (*Id.* at 12-13) Bosch alleges that the jury overlooked Fehrsen's admission that Anglo American Industrial Corporation ("AMIC") lacked expertise with rubber beam blade technology in September of 1992, as well as evidence showing that Fehrsen was skeptical about the '974 patent working, his preference being instead the second inclined beam solution contained in his notes. (*Id.* at 14) Furthermore, Bosch contends that neither Swanepoel nor Fehrsen claimed ownership of the spoiler

invention when Merkel presented it on behalf of Bosch at the 1997 meeting in Leipzig. (*Id.*) According to Bosch, Fehrsen warranted that Bosch had not used any of AMIC's beam blade technology before selling it to Trico Products Corporation ("Trico"), a Bosch competitor, who neither caused AMIC to sue Bosch for infringement nor made products incorporating the spoiler found in the '974 patent. (*Id.* at 15-16) Moreover, Bosch points to inconsistencies in Fehrsen's testimony to further indicate that the weight given to his testimony by the jury was misplaced. (*Id.* at 16-18)

Pylon responds that a new trial should not be granted because the jury's verdict on the derivation of claims 1 and 8 of the '974 patent was not against the clear weight of the evidence. (D.I. 330 at 13) Pylon notes that Bosch never produced the flip chart that allegedly contained Merkel's drawing of the '974 patent and that Merkel expressed uncertainty regarding whether the flip chart ever existed. (*Id.*) Furthermore, Pylon contends that Bosch's failure to bring a beam blade to market prior to its joint venture with AMIC undercuts its suggestion that its superior understanding of beam blade technology enabled it to propose a spoiler. (*Id.* at 14) Pylon also maintains that Fehrsen's admission that he preferred the inclined beam design does not disprove that he conceived of both designs. (*Id.* at 14-15) According to Pylon, Fehrsen and Swanepoel adequately explained their failure to assert ownership over the design of the '974 patent at the 1997 meeting because they believed Bosch would not commercialize the product without a license, which they refused to grant. (*Id.* at 15) Moreover, Pylon contends that the minor inconsistencies in the testimony of Fehrsen and Swanepoel is insufficient to warrant a new trial. (*Id.* at 16)

To the extent Bosch contends that the jury's verdict is against the weight of the evidence, the court acknowledges that it need not construe the evidence in the light most favorable to Pylon in the context of determining whether a new trial is warranted. However, even without the benefit of this less stringent standard, the court concludes that the jury's derivation verdict regarding claim 1 of the '974 patent is supported by sufficient evidence, and the court is not persuaded that the jury's verdict shocks the conscience or results in a miscarriage of justice. The court acknowledges that Bosch presented evidence in the form of witness testimony, manuals and circumstantial factors in support of its argument. However, Pylon also presented witness testimony, notes from the September 1992 meeting and circumstantial factors in support of its derivation claim regarding claim 1 of the '974 patent, and the court shall not overturn the jury's factual findings where a clear evidentiary basis for those findings exists. Accordingly, the court concludes that a new trial is not warranted with respect to the derivation of claim 1 of the '974 patent.

Pursuant to Fed. R. Civ. P. 50(c)(1), the court conditionally grants a new trial on the derivation of claim 8 of the '974 patent because the jury's verdict was against the clear weight of the evidence. As previously explained in the court's ruling on Bosch's motion for JMOL regarding the derivation of claim 8 of the '974 patent, no evidence was presented at trial from which a jury could reasonably conclude that the claim 8 limitation regarding the length of the leading edge face extending across the wiper blade was derived from Fehrsen. As a result, the jury's verdict goes against the clear weight of the evidence presented at trial, and if this court's order granting Bosch's motion for JMOL is reversed on appeal, a new trial is warranted on the derivation of claim 8 of the '974

patent. Accordingly, Bosch's motion for a new trial on the derivation of claim 8 of the '974 patent is conditionally granted.

3. Infringement of claim 7 of the '434 patent

At the conclusion of its argument for JMOL regarding the infringement of claim 7 of the '434 patent, Bosch briefly requests a new trial without referencing any evidence specific to that request. (D.I. 310 at 33) To the extent Bosch contends that the jury's verdict is against the weight of the evidence, the court acknowledges that it need not construe the evidence in the light most favorable to Pylon in the context of determining whether a new trial is warranted. However, even without the benefit of this less stringent standard, the court concludes that the jury's non-infringement verdict regarding claim 7 of the '434 patent is supported by sufficient evidence, and the court is not persuaded that the jury's verdict results in a miscarriage of justice.

4. Pylon's closing argument and expert testimony

Bosch alleges that Pylon presented expert testimony which was not disclosed in Buechele's expert report, and Pylon's counsel made an improper closing argument that unfairly influenced the jury verdict, thus warranting a new trial. (D.I. 310 at 33) Specifically, Bosch contends that Buechele's testimony describing the relationship of the '214 patent to claim 8 of the '974 patent fell outside the scope of Buechele's expert report. (*Id.* at 34) Bosch maintains that Buechele's testimony describing the placement of the end caps in the '434 patent as a mere design choice also exceeds the scope of his expert report. (*Id.* at 35) Furthermore, Bosch contends that Buechele's claim that he himself designed the beam blade with the spoiler as shown in the '974 patent may

have contributed to the jury's finding that claims 1 and 8 of the '974 patent were obvious. (*Id.* at 35-36) According to Bosch, Pylon's closing argument was also improper because Pylon's counsel repeatedly referred to the absence of Wolfgang Leutsch and Thomas Kotlarski, two named inventors of the '974 patent, in violation of the stipulated pretrial order stating that "a party's failure to call a witness identified on the witness list shall not be commented on during trial." (*Id.* at 37) Bosch contends that Pylon also disregarded the court's order to refrain from referring to the infringement of the '974 patent, and Pylon misstated the law of derivation by telling the jury that "if there is derivation on claim 1, claim 8 likewise goes because all the elements of claim 1 are in claim 8." (*Id.* at 37-38) Bosch maintains that the court's curative instructions to the jury were insufficient to cure the harm caused by Pylon's closing argument. (*Id.* at 37)

In response, Pylon contends that all of the expert testimony Bosch cites was contained in the expert reports and was known to Bosch through discovery. (D.I. 330 at 37) Citing *Genzyme Corp. v. Atrium Medical Corp.*, 315 F. Supp. 2d 552, 584 (D. Del. 2004), Pylon also maintains that its closing arguments do not warrant a new trial because they did not rise to the level of affecting a "**substantial right in the context of the entire trial record.**" (*Id.* at 41) Pylon claims that the court's curative instruction remedied Pylon's statements regarding the absence of certain witnesses from trial. (*Id.* at 42) Furthermore, Pylon notes that Bosch did not object to Pylon's reference to the non-infringement of claims 1 and 8 of the '974 patent at trial and, regardless, the statements regarding non-infringement were inconsequential because the jury did not rule on infringement of those claims. (*Id.*) Pylon contends that its reference to the

derivation of claim 1 as it relates to claim 8 was proper because the only additional limitation in claim 8 was well-known in the prior art and Bosch failed to object at trial. (*Id.* at 43)

To the extent Bosch contends that the jury's verdict was unfairly influenced by Pylon's counsel's improper conduct, the court acknowledges that it need not construe the evidence in the light most favorable to Pylon in the context of determining whether a new trial is warranted. However, even without the benefit of this less stringent standard, the court is not persuaded that the jury's verdict was unfairly influenced by Pylon's actions. The court acknowledges that Bosch has identified certain conduct by Pylon's trial counsel which may reasonably be questioned. In particular, Pylon's counsel mentioned the "missing witnesses" and the infringement of the '974 patent in closing arguments, contrary to the court's instructions. However, the court finds that it is not reasonably probable that Buechele's testimony and Pylon's closing argument had a significant influence on the jury's deliberations, and the court's curative instruction was sufficient to remedy any prejudice caused by the statements. Accordingly, the court concludes that a new trial is not warranted due to Pylon's counsel's misconduct.

5. Cumulative references on claim 13 of the '905 patent

Pylon argues that the court should grant a new trial on the validity of claim 13 of the '905 patent because the jury was unfairly prejudiced by Bosch's argument that International Publication WO 00/34090 ("the '090 publication") was substantively considered by the patent examiner and the prior art relied upon by Pylon was cumulative to the '090 publication. (D.I. 321 at 12) Bosch responds that the USPTO did, in fact, consider the '090 publication during the prosecution of the '905 patent

because the '090 publication published in between the foreign filing date and the U.S filing date of the '905 patent, and USPTO regulations require an examiner to consider intervening references without regard to the claimed priority date and make any appropriate rejections to pending claims. (*Id.* at 20-22) According to Bosch, the examiner in the instant case considered the '090 publication and allowed the claims of the '905 patent over the '090 publication. (*Id.* at 22-23) Even if the court were to determine that the '090 publication was neither relevant to the '905 patent nor considered by the examiner, Bosch contends that it properly cross-examined Pylon's expert regarding whether the prior art presented by Pylon at trial was cumulative to the references considered by the examiner. (*Id.* at 24) Moreover, Bosch contends that Pylon could not have been so prejudiced as to warrant a new trial when Pylon neither addressed the '090 publication during its re-direct nor sought a curative instruction, and Bosch refrained from raising its cumulative references argument during closings, consistent with Pylon's request. (*Id.* at 26-27)

Pylon replies that the examiner did not allow the claims of the '905 patent over the '090 publication because the foreign priority claim of the '905 patent was perfected and the USPTO regulations do not require an examiner to issue a rejection on references filed between the foreign priority date and the U.S. filing date. (D.I. 344 at 18) According to Pylon, Bosch's speculation that the examiner considered the '090 publication during the examination of claim 13 of the '905 patent was its sole justification for cross-examining Pylon's expert regarding whether the references presented by Pylon were cumulative to the '090 publication. (*Id.* at 21) Furthermore, Pylon justifies its failure to request a curative instruction by noting that it feared further

discussion of the '090 publication would only continue to prejudice the jury. (*Id.* at 22)

To the extent Pylon contends that the jury's verdict was unfairly influenced by Bosch's argument regarding the '090 publication, the court acknowledges that it need not construe the evidence in the light most favorable to Bosch in the context of determining whether a new trial is warranted. However, even without the benefit of this less stringent standard, the court cannot find it reasonably probable that Buechele's testimony on cross-examination regarding the '090 publication had a significant influence on the jury's deliberations, particularly because Bosch did not refer to the '090 publication again in its closing arguments and Pylon did not bother to re-direct its expert or request a curative instruction regarding Bosch's cross-examination of Pylon's expert. Accordingly, the court concludes that a new trial is not warranted as a result of Bosch's argument that the '090 publication was substantively considered by the patent examiner and the prior art relied upon by Pylon was cumulative to the '090 publication.

C. Motion to Alter or Amend the Judgment

The purpose of a motion to alter or amend the judgment is to "correct manifest errors of law or fact or to present newly discovered evidence." *Max's Seafood Café By Lou-Ann, Inc. v. Quinteros*, 176 F.3d 669, 677 (3d Cir. 1999). Therefore, a court should alter or amend its judgment only if the movant demonstrates at least one of the following: (1) a change in the controlling law; (2) availability of new evidence not available when summary judgment was granted; or (3) a need to correct a clear error of law or fact or to prevent manifest injustice. *See id.*

Citing to the evidence presented in support of its renewed motion for JMOL on

the validity of claim 13 of the '434 patent, Pylon contends that no evidence supports the jury's finding that end caps made of plastic were not disclosed in the '507 patent or otherwise known in the prior art. (D.I. 319 at 9-10) According to Pylon, it would be a manifest injustice to uphold the validity of claim 13 as non-obvious in view of the '507 patent. (*Id.*) Bosch responds that Pylon's motion to alter or amend the judgment should not be granted because it is based on the same argument Pylon presented in support of its motion for JMOL under Fed. R. Civ. P. 50(b). (D.I. 334 at 16) Unlike motions raised under Rule 50(b), Bosch contends that motions made under Rule 59(e), to alter or amend a judgment to prevent manifest injustice, are reserved for "exigent circumstances such as a case of manifest and extreme abuse of the jury's function." (*Id.* at 16-17) Bosch notes that Rule 59(e) is "an improper device to set aside a jury verdict based upon evidentiary insufficiency." *Hegger v. Green*, 646 F.2d 22, 28 (2d Cir. 1981).

Pylon's arguments concerning the invalidity of claim 13 of the '434 patent have already been considered by the court. Pylon has not demonstrated that alteration or amendment of the judgment is warranted based on a need to correct a clear error of law or fact or to prevent manifest injustice.

D. Motion for a Permanent Injunction

In *eBay Inc. v. MercExchange, L.L.C.* (hereinafter "*eBay*"), the Supreme Court overruled the Federal Circuit's prior "general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances." 547 U.S. 388, 126 S. Ct. 1837, 164 L. Ed. 2d 641 (2006) (vacating and remanding

MercExchange, L.L.C. v. eBay Inc., 401 F.3d 1323, 1339 (2005)). Under *eBay*, permanent injunctions in patent cases must be based on a case-by-case assessment of the traditional equitable factors governing injunctions. *Id.* at 392-93. That is, to be awarded a permanent injunction, a plaintiff must demonstrate that: (1) “it has suffered an irreparable injury;” (2) “remedies available at law, such as monetary damages, are inadequate to compensate for that injury;” (3) “considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted;” and (4) “the public interest would not be disserved by a permanent injunction.” *Id.* “[T]he decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts, and that discretion must be exercised consistent with traditional principles of equity, in patent disputes no less than in other cases governed by such standards.” *Id.* at 393.

Bosch contends that it suffered irreparable harm in the form of a loss of market share, loss of customers, loss of business opportunities, loss of good will and brand loyalty, and price erosion due to Pylon’s infringement. (D.I. 353 at 11-12) According to Bosch, monetary damages alone are insufficient compensation for its statutory right to exclude its competitor from using the patented technology, and it is impossible to calculate what Bosch’s market share would have been but for Pylon’s infringement. (*Id.* at 14-15) Furthermore, Bosch contends that Pylon’s unstable financial condition makes it unlikely Bosch would be able to recover the amounts to which it is entitled. (*Id.* at 15) In weighing the balance of hardships the parties would suffer, Bosch contends that, without a permanent injunction to protect its right to exclude a direct competitor, Bosch

may need to lay off employees and will not be able to recoup its research and development costs. (*Id.* at 15-16) In contrast, Bosch observes that Pylon wrongfully profited from the sale of infringing products for the past several years. (*Id.* at 16) Moreover, Bosch maintains that the denial of a permanent injunction would harm the public interest by exposing the public to Pylon's inferior product, reducing the value of patents and disincentivizing scientific progress. (*Id.* at 16-17)

Pylon first responds that Bosch's motion for a permanent injunction is premature because discovery on damages has yet to be taken in this bifurcated trial. (D.I. 331 at 9) Turning to the four factors of the permanent injunction analysis, Pylon contends that Bosch's undue delay in seeking the injunction indicates that Bosch did not suffer irreparable injury. (*Id.* at 11-12) Furthermore, Pylon maintains that Bosch cannot demonstrate the inadequacy of money damages because Bosch operates in a different segment of the market and has offered to exchange its patent rights for licensing agreements and monetary compensation. (*Id.* at 13-16) According to Pylon, Bosch's damages theories regarding Pylon's potential inability to pay a monetary judgment are highly speculative and do not warrant the entry of a permanent injunction. (*Id.* at 16-17) Pylon contends that the balance of equities also weighs in its favor because, while Bosch is an international conglomerate with a diverse product base in multiple industries, Pylon is a small domestic corporation that focuses on the manufacture and sale of wiper blades and its business would be profoundly affected by a permanent injunction. (*Id.* at 18) Furthermore, Pylon argues that its continuing right to compete outweighs the public interest in protecting valid patent rights because the jury's verdict

will likely not survive post-trial or appellate review. (*Id.* at 19-20) If the court enters an injunction despite Pylon's contentions, Pylon requests that the court stay enforcement of the injunction pending appeal. (*Id.* at 20)

Although the quantum of evidence required under *eBay* is relatively unclear, the court concludes that Bosch has not met its burden for a permanent injunction. The *eBay* Court specifically cautioned against the application of categorical rules, classifications, and assumptions in permanent injunction analyses. *Id.* Nevertheless, courts, presumably struggling to balance the absence of a presumption of irreparable harm with a patentee's right to exclude, have frequently focused upon the nature of the competition between plaintiff and defendant in the relevant market in the context of evaluating irreparable harm and the adequacy of money damages. Courts awarding permanent injunctions typically do so under circumstances in which the plaintiff practices its invention and is a direct market competitor.⁵ Plaintiffs also frequently succeed when their patented technology is at the core of its business, and/or where the

⁵See, e.g., *Muniauction, Inc. v. Thomson Corp.*, 502 F. Supp. 2d 477, 482 (W.D. Pa. 2007) ("Plaintiff and defendants are direct competitors in a two-supplier market. If plaintiff cannot prevent its only competitor's continued infringement of its patent, the patent is of little value"); *Johns Hopkins Univ. v. Datascope Corp.*, 513 F. Supp. 2d 578, 586 (D. Md. 2007) (granting permanent injunction where infringing product was plaintiffs' "only competition" and "thus, its sale reduce[d] the [p]laintiffs' market share"); *Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp.*, No. Civ. A. 03-2910, 2006 WL 3813778, at *4 (S.D. Tex. Dec. 27, 2006) (granting permanent injunction requiring structural modifications to infringing deepwater drilling rigs where "the customer base for deep water drill rigs is small, and [defendant] has not only used [its] rigs equipped with the infringing structure to compete for the same customers and contracts as [plaintiff], but also to win contracts over competing bids from [plaintiff]").

market for the patented technology is volatile or still developing.⁶

The court notes at this juncture that Bosch has not provided a clear, summary-level overview of the relevant market for the wiper blade technology at issue. Furthermore, on the record before the court, it does not appear that Bosch and Pylon are the only market participants, and Bosch does not contest Pylon's identification of Federal Mogul, Trico and Shell as additional beam blade competitors. (D.I. 331 at 15) Even assuming that Bosch had clearly defined a relevant market in which Bosch and Pylon are the major market players, the parties failed to provide the court with a breakdown illuminating their relative market percentages. This is not a clear case of a two-supplier market wherein a sale to Pylon necessarily represents the loss of a sale to Bosch. *Cf. TruePosition, Inc. v. Andrew Corp.*, 611 F. Supp. 2d 400 (D. Del. 2009) (holding that infringement by a direct competitor in a two-supplier market mitigates in favor of enhanced damages). In addition, Bosch manufactures a wide variety of automotive and home products, and wiper blades alone are not at the core of its business. In light of Bosch's failure to define a relevant market, the existence of additional competitors and the non-core nature of Bosch's wiper blade business in

⁶See *Martek Biosciences Corp. v. Nutrinova Inc.*, 520 F. Supp. 2d 537, 558-59 (D. Del. 2007) (granting permanent injunction where plaintiff was a direct competitor "likely to lose market share that it may not be able to recapture," as plaintiff's patented technology was its primary revenue source, and defendant was plaintiff's only competitor and was "targeting [plaintiff's] customers in that industry"); *TiVo, Inc. v. EchoStar*, 446 F. Supp. 2d 664 (E.D. Tex. 2006) (granting permanent injunction where: (1) parties were direct competitors; (2) "plaintiff [was] losing market share at a critical time in the market's development"; (3) the parties agreed that customers in the relevant market tend to remain customers of the company they first purchased from; and (4) as a "relatively new company with only one primary product," plaintiff's "primary focus is on growing a customer base specifically around the product" competing with the infringing product).

relation to its business as a whole, the court concludes that Bosch has failed to show that it would suffer irreparable harm absent a permanent injunction.

IV. CONCLUSION

For the foregoing reasons, the court: (1) denies Bosch's renewed motion for JMOL or for a new trial with respect to the derivation of claim 1 of the '974 patent and the infringement of claim 7 of the '434 patent and grants the motion in all other respects (D.I. 309); (2) denies Pylon's renewed motion for JMOL with respect to non-infringement of claims 1, 5 and 13 of the '434 patent (D.I. 316); (3) denies Pylon's renewed motion for JMOL or to alter or amend the judgment with respect to the invalidity of claim 13 of the '434 patent (D.I. 318); (4) denies Pylon's renewed motion for JMOL or for a new trial with respect to the invalidity of the '905 patent (D.I. 320); (5) denies Bosch 's motion for leave to file a sur-reply (D.I. 351) as moot; and (6) denies Bosch 's motion for a permanent injunction (D.I. 311). An appropriate order shall issue.