

IN THE UNITED STATES DISTRICT COURT
 FOR THE DISTRICT OF DELAWARE

ARCELORMITTAL FRANCE, and)
 ARCELORMITTAL ATLANTIQUE)
 ET LORRAINE,)
)
 Plaintiff,)
)
 v.)
)
 AK STEEL CORPORATION,)
 SEVERSTAL DEARBORN, INC, and)
 WHEELING-NISSHIN, INC.,)
)
 Defendants.)

Civ. No. 10-050-SLR

Jeffrey B. Bove, Esquire and Chad S. C. Stover, Esquire of Connolly, Bove, Lodge & Hutz, Wilmington, Delaware. Counsel for Plaintiffs. Of Counsel: Barry J. Herman, Esquire, Jean-Paul Lavalleye, Esquire, Eric W. Schweibenz, Esquire, Jeffrey B. McIntyre, Esquire, Thomas J. Fisher, Esquire, Alexander B. Englehart, Esquire and Lindsay J. Kile, Esquire of Oblon, Spivak, McCelland, Maier and Neustadt, LLP. Jay L. Lazar, Esquire of Arcelormittal.

Adam W. Poff, Esquire and Monte T. Squire, Esquire of Young, Conaway, Stargatt & Taylor, LLP, Wilmington, Delaware. Counsel for Defendants AK Steel Corporation. Of Counsel: Roderick R. McKelvie, Esquire, Christopher N. Sipes, Esquire, Jeffrey H. Lerner, Esquire and Maureen M. Japha, Esquire of Covington & Burling LLP. John J. Kuzman, Jr., Esquire, of Kuzman Law Office, LLC.

Steven J. Balick, Esquire and Tiffany Geyer Lydon, Esquire of Ashby & Geddes, Wilmington, Delaware. Counsel for Defendants Severstal Dearborn, Inc., and Wheeling-Nisshin Inc. Of Counsel: David J. Simonelli, Esquire and Richard W. Hoffman, Esquire of Reising Ethington, P.C.

MEMORANDUM OPINION

Dated: August 25, 2011
 Wilmington, Delaware


ROBINSON, District Judge

I. INTRODUCTION

Plaintiffs ArcelorMittal France and ArcelorMittal Atlantique et Lorraine (collectively “plaintiffs”) brought suit against defendants AK Steel Corporation (“AK Steel”), Severstal Dearborn, Inc. (“Severstal”), and Wheeling Nisshin, Inc. (“Wheeling”) (collectively “defendants”), alleging infringement of one or more claims of U.S. Patent No. 6,296,805¹ (“the ‘805 patent”). (D.I. 1) The parties agreed to forego summary judgment practice in favor of an expedited trial (D.I. 68) which took place from January 11-14, 2011. At the end of trial, the jury returned a verdict of no infringement in favor of defendants, and further found that the ‘805 patent was invalid for being anticipated and obvious. (D.I. 214) Currently before the court is plaintiffs’ motion for JMOL of no anticipation and no obviousness (D.I. 226), as well as plaintiffs’ motion for a new trial. (D.I. 228)

II. BACKGROUND

A. Technology Overview

The court presumes familiarity with the steel sheet fabrication technology at issue in this case as detailed in its prior opinion. *See ArcelorMittal France v. AK Steel Corp.*, 755 F. Supp. 2d 542, 546-548 (D. Del. 2010). In summary, all steel sheets are made by first subjecting a thick steel slab to a hot-rolling operation, which allows making a coil of steel sheet having a thickness that may be reduced to about 2 mm. If thinner steel sheets are desired, the hot-rolled steel sheet is further cold-rolled to obtain the desired thickness. Such steel sheets can either be uncoated or coated after rolling

¹ The ‘805 patent is directed to coated hot- and cold-rolled steel sheets that have a very high mechanical resistance after thermal treatment.

the sheet to the desired thickness.

The '805 patent is directed to a boron-containing steel sheet that is coated with aluminum prior to the sheet being formed into, for example, automobile parts. The chemical composition of the boron-containing steel sheet covered by the claims of the '805 patent can be transformed into a much higher strength steel as a result of a high-temperature thermal treatment process known as "hot-stamping." The pre-applied aluminum-based coating protects the steel from the harmful effects of oxidation that otherwise occur as a result of the high temperature required for thermal treatment.

B. Procedural History

This case presents itself in somewhat of a unique posture. The parties agreed to forego summary judgment practice in favor of an expedited trial, and defendants agreed that construction of just two claim terms would be case dispositive. (D.I. 68) On December 16, 2010, the court construed the identified terms: "a hot-rolled steel sheet coated with an aluminum or aluminum alloy coating" and "the steel sheet has a very high mechanical resistance after thermal treatment." (D.I. 188, 189) Subsequently, the court granted defendants' motion to preclude plaintiffs from arguing literal infringement because defendants' products were cold-rolled prior to coating and thermal treatment, thus making their products different from what is literally covered by the '805 patent's claims. (D.I. 205)

III. STANDARDS

A. Motion for Judgment as a Matter of Law

To prevail on a renewed motion for judgment as a matter of law following a jury

trial 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 conclusions 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)). “Substantial’ evidence is such relevant evidence from the record taken as a whole as might be acceptable 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 nor “substitute its choice for that of the jury between conflicting elements of the evidence.” *Id.* In summary, 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).

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. Darflon, 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 in the following situations: (1) where 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) where newly-discovered evidence surfaces that would likely alter the outcome of the trial; (3) where improper conduct by an attorney or the court unfairly influenced the verdict; or (4) where 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 not 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.

Lind v. Schenley Indus. Inc., 278 F.2d 79, 90-91 (3d Cir. 1960).

IV. DISCUSSION

A. Renewed Motion for Judgment as a Matter of Law

Plaintiffs argue that the jury erred in finding claims 1, 2, 5, 7 and 16 of the '805 patent invalid as anticipated by the article entitled "Heat Treated Boron Steels in the Automotive Industry" ("the Bano article"). Furthermore, plaintiffs contend that the jurors

erred in finding said claims obvious in light of a combination of the Bano article and, in various combinations, French Patent No. 1,297,906 (“the ‘906 patent”) and the 1992 Ford Specification. (D.I. 239) Specifically, plaintiffs allege that: (1) defendants failed to meet their burden of proving that the Bano article was prior art under 35 U.S.C. § 102(b); (2) the Bano article does not disclose several limitations of the ‘805 patent; and (3) there was no motivation to combine the Bano article with any of the other asserted pieces of prior art.

1. Whether the Bano article was a “printed publication” under 35 U.S.C. § 102(b)²

Plaintiffs argue that defendants failed to establish that the Bano article was available to the public as a “printed publication” prior to the ‘805 patent’s priority date of July 9, 1998 and, therefore, is not prior art under 35 U.S.C. § 102(b). (D.I. 239 at 2-7) If the Bano article is not prior art under § 102(b), then the jury erred in finding the asserted claims of the ‘805 patent invalid, as the Bano article serves both as the single reference for anticipation and the primary reference for obviousness. (*Id.*)

Substantial evidence supports the jury’s finding that the Bano article was available to the public as a printed publication prior to the ‘805 patent’s priority date.³ The jury heard testimony from one of the authors of the Bano article, Mr. Jean-Pierre

² The parties agree that July 9, 1998 is the priority date of the ‘805 patent.

³ Plaintiffs argue that defendants failed to establish any specific date of public availability of the Bano article and, therefore, they have not met their burden of proving that it is a “printed publication.” This, however, is not the law. Defendants do not have to prove that the Bano article was available to the public on a specific date. Rather, they must prove, by clear and convincing evidence, that the Bano article was publically available **prior** to the critical date of the ‘805 patent. See *Kenexa v. Brassring, Inc. v. Takeo Corp.*, 751 F. Supp. 2d 735, 759-60 (D. Del. 2010).

Laurent (“Laurent”), that he presented the text⁴ of the Bano article in the form of a PowerPoint presentation at a public meeting of the Iron & Steel Society in October of 2007. (D.I. 212 at 247:12-22) The Federal Circuit has held that presentations such as these, given to expert members of the public without an indication that the presenters had an expectation that no notes would be taken, rendered the presentations “printed publications” for purposes of § 102(b). *In re Klopfenstein*, 380 F.3d 1345, 1350-1351 (Fed. Cir. 2004). Although the duration of the presentation may have been short, a factor that mitigates away from finding that the Bano article was a “printed publication” as of the date of the conference, the jury’s verdict is supported by substantial evidence because “a reference, ‘however ephemeral its existence,’ may be a ‘printed publication’ if it ‘goes direct to those whose interests make them likely to observe and remember whatever it may contain that is new and useful.’” *Id.* at 1351 (citations omitted).

The jury heard further testimony that the Bano article was available to the public in book form when the Iron & Steel Society distributed copies of the book to people who attended the conference. (D.I. 244 at 605:9-18; D.I. 245 at 906-5-14; D.I. 248:18-249:3) Defendants even introduced DTX-17A, a photocopy of the inside cover of the book that contains a librarian’s notation signifying that the book was purchased from the International Steel Society for \$65 in March of 2008.⁵ (D.I. 244 at 599:1-16)

⁴ Plaintiffs argue that the PowerPoint presentation of the article should not count for the article’s public availability because it was the PowerPoint that was publically available, not the article itself. This argument is unavailing, as here Laurent testified that the **text** of the article was displayed in the PowerPoint presentation. The presentation itself conveyed the article to the public. It was not a mere summation.

⁵ Plaintiffs take issue with the introduction of DTX-17A under F.R.E. 803(6). They reason that the witness through whom it was introduced, Laura Burroughs

2. Alleged limitations not found in the Bano article

The jury found that the asserted claims of the '805 patent were anticipated by the Bano article despite the fact that two of the limitations, "precoating the steel sheet prior to thermal treatment" and "an aluminum coating," were not expressly disclosed by it. Defendants do not deny that the Bano article does not expressly disclose said limitations and, instead, argue that the jury's verdict was proper based on the Bano article's implicit disclosure.

a. Precoating the sheet prior to thermal treatment

Substantial evidence supports the jury's finding that the Bano article implicitly discloses precoating the steel sheet prior to thermal treatment. The authors of the Bano article stated that "[i]t is possible to coat this new heat treated boron steel after degreasing as with conventional steels." (DTX6 at 676) According to defendants' expert, Dr. James Fekete ("Fekete"), this statement implicitly means that the steel can be coated prior to thermal treatment because thermal treatment during hot stamping burns away any oil on the steel, and degreasing is only necessary when coating precedes the thermal treatment in order to allow the coating to adhere. (D.I. 295 918:14-920:5) Further highlighting this distinction is the fact that the Bano article also refers to coating "finished parts," i.e., parts that have already gone through a heat treatment process. (*Id.*)

While the jury heard testimony that the Bano article does not disclose precoated

("Burroughs"), a research engineer for AK Steel, is not a "custodian or other qualified witness" who could testify to the standard operating procedures of AK Steel's library. The court is unpersuaded by plaintiffs' argument, as they had an opportunity to cross examine Burroughs, yet they cite no testimony that illustrates her lack of knowledge.

boron steel (D.I. 242 at 206-09), the jury was free to give whatever weight it felt appropriate to the testimony of the various experts and fact witnesses. Here, the jury accepted the opinion of defendants' expert and returned a finding, supported by substantial evidence, that the Bano article discloses precoated boron steel.

b. Composition of the coating

Once again, the jury's verdict is supported by substantial evidence. There is no dispute that the Bano article discloses coating boron steel at some point in the fabrication process. However, the Bano article does not explicitly state what type of coating can be used on the steel. The jury heard testimony from defendants' expert, Dr. George St. Pierre ("St. Pierre"), who testified during cross examination that, when reading about "coating" in the Bano article, "[t]he two [types of coatings] that would come to mind immediately would be zinc coatings, galvanize, and **aluminum** coatings. And for high temperatures, it would be clearly aluminum coating." (D.I. 245 at 797:18-24) The '805 patent itself describes only two types of coating that existed in the prior art: zinc and aluminum. ('805 patent, col. 1:28-29)⁶

While the Bano article does not expressly state that "aluminum" is a viable form of coating, the jury had substantial evidence on which to find that it was implicitly disclosed. Here, aluminum was a member of a very small class of metals suitable for

⁶ Plaintiffs further argue that the Bano article could not possibly have disclosed the specific aluminum alloy coating of claim 7. (D.I. 227 at 8) Defendants argue, and plaintiffs do not contest, that plaintiffs failed to assert this argument regarding claim 7 in their rule 50(a) motion and, therefore, are estopped from arguing it in their 50(b) motion. (D.I. 236 at 15 n.3) The court agrees. Moreover, the jury heard testimony that the claimed coating was the same "type 1" aluminum coating that had been known in the art for years. (D.I. 243 at 388:8-389:16, 235:24-236:17) It was one of only two types of aluminum coating used in the automotive industry. (*Id.* at 236:10-13)

use in coating boron steel. Under *In re Petering*, 301 F.2d 676, 681-682 (CCPA 1962), this limited class is sufficient to implicitly disclose aluminum. See also *Eli Lilly and Co. v. Zenith Goldline Pharm.*, 471 F.3d 1369, 1376 (Fed. Cir. 2006).

3. Motivation to combine the Bano article with other prior art

In addition to finding the '805 patent anticipated by the Bano article alone, the jury also found it to be obvious in view of the Bano article combined with the '906 patent, and that it was obvious in view of the Bano article combined with the '906 patent and the 1992 Ford specification.⁷ (D.I. 215) Plaintiffs argue that there was no reason to combine said references. (D.I. 227 at 16-20)

Substantial evidence supports the jury's finding that a person of ordinary skill in the art would have a motivation to combine the Bano article with the '906 patent, and that said combination would render the '805 patent obvious. While plaintiffs argue that the '906 patent is directed to hot forging, a process that is very different from the heat treatment in the '805 patent, St. Pierre and Fekete testified that the hot forging process of the '906 patent and the hot stamping process of the Bano article were both types of hot forming and, thus, analogous art. (D.I. 245 at 730:15-731:3, 903:20-904:9)

The jury heard additional testimony that a combination of the '906 patent and the Bano article solves a problem that is also identified and solved by the '805 patent:

⁷ Plaintiffs point out that defendants only used the 1992 Ford specification to show that some forms of boron steel that existed in the prior art had mechanical resistance values within the scope of the claims of the '805 patent. Plaintiffs make no arguments as to why a person of ordinary skill in the art would not have combined these references other than an implicit argument that they are duplicative because the Bano article also discloses boron steel with the same mechanical resistance values. Therefore, the court will not address a motivation to combine the 1992 Ford specification reference with the other asserted prior art.

decarbonization⁸ of the boron steel and formation of an oxide film that requires removal. (D.I. 236 at 16) The Bano article discloses boron steel that falls within the range of the '805 patent's claims. (D.I. 243 at 232:12-234:25, 250:12-252:2; D.I. 245 at 740:20-741:23, 909:24-910:12) The '906 patent teaches the use of an aluminum-base protective coating to prevent scaling and decarbonization. (D.I. 245 at 903:6-14) The '906 patent provides a reasonable expectation of success when used in combination with the steel disclosed in the Bano article, by disclosing that, "[d]uring hot deformation of casting provided with a protective coating according to the invention, one finds that the coating deforms at the same time as the casting, thus making it possible to obtain excellent protection against oxidation and a defined product also coated by a thin layer of aluminum base alloy film." (DTX-173T at AM024122)

Plaintiffs argue that the hot forging process of the '906 patent is radically different from the stamping process used in the '805 patent because it does not use the same rapid cooling (quenching) required to transform the boron steel into a martensitic structure. (D.I. 227 at 18-19) This argument is based on the testimony of plaintiffs' expert, Dr. Robert Wagoner ("Wagoner"), who opined that the transformation of boron steel into a martensitic structure via rapid cooling would affect whether the coating survives. (D.I. 246 at 1092:7-1093:5)

It is undisputed, however, that the Bano article discloses the rapid cooling required to create a martensitic structure, and that the '906 patent discloses aluminum

⁸ Defendants use decarburization and decarbonization interchangeably. As they mean functionally the same thing, i.e., removing carbon in metal, the court will use decarbonization for consistency sake.

coatings. (*Id.*) Wagoner himself admitted that he was not an expert in coatings (D.I. 243 at 449:23-24) and St. Pierre testified that the fact that aluminum coatings will remain bonded to steel during the quenching process was known in the art since 1991. (D.I. 245 at 734:3-736:3) Therefore, the jury's verdict is supported by substantial evidence.

B. Motion for a new trial

Plaintiffs incorporate by reference their arguments in support of their motion for judgment as a matter of law as additional grounds for their motion for a new trial.⁹ In addition, plaintiffs argue that: (1) defendants' experts testified on matters that had not previously been disclosed to plaintiffs; (2) defendants' counsel made improper and prejudicial statements during closing; (3) the court impermissibly allowed the jury to construe the meaning of asserted claim terms; (4) the jury instructions were improper; (5) the court's claim construction was improper; and (6) the court erred in barring plaintiffs from asserting literal infringement at trial. (D.I. 229) For the reasons that follow, plaintiffs' motion is denied.

1. Testimony of defendants' experts

a. Testimony as to date of public availability of the Bano article

Plaintiffs argue that St. Pierre and Fekete testified about the publication date of the Bano article which was beyond the scope of their expert reports. Specifically, St. Pierre testified about an investigation he performed as he inquired about the Bano

⁹ Plaintiffs' motion for a new trial based on their arguments for judgment as a matter of law is denied for the reasons stated in the court's judgment as a matter of law discussion.

article's submission at the Library of Congress. This investigation was not in his expert report and was objected to at trial. (D.I. 245 at 737:20-739:9) Similarly, Fekete testified that attendees of the Iron and Steel conference received copies of the Bano article in book form if they registered for the conference. (*Id.* at 904:10-906:14)

Defendants do not deny that St. Pierre testified beyond the scope of his expert report, and that plaintiffs objected to said testimony.¹⁰ Therefore, the court will assume that the jury verdict could not be based on St. Pierre's testimony as evidence of the Bano article's publication date.

However, Fekete's testimony was not objected to and, because Fekete actually attended the conference at which the Bano article was distributed, his testimony was that of a fact witness and not an expert. Experts are allowed to testify as fact witnesses where the expert actually witnessed the events to which he is testifying and his testimony is not based on scientific, technical or other specialized knowledge within the scope of Rule 702. *Hadley v. Pfizer Inc.*, Civ. No. 08-1440, 2009 WL 1597952 at *4 (E.D. Pa June 5, 2009); *Hudson v. State*, 956 A.2d 1233, 1238 n.6 (Del. Super. 2008). The jury had substantial evidence upon which to base their verdict.

b. Testimony as to other prior art references

Plaintiffs argue that defendants' experts improperly testified about two other prior art references, British patent 1,490,535 ("the '535 patent") and an article entitled

¹⁰ As noted in the court's trial guidelines, expert testimony that is beyond the scope of the expert's report and related discovery is impermissible and "the party proffering such testimony may be sanctioned, e.g., by having to assume the costs for a new trial." Guidelines for Civil Trials (July 12, 2011), at 3, *available at* http://www.ded.uscourts.gov/SLR/Misc/Guidelines-Civil_Trial_07-12-11.pdf.

“Structural Studies of Hot Dip Aluminized Coatings on Mild Steel” (“the Mohanty article”) to “fill holes” in their asserted obviousness combinations. (D.I. 229 at 5-7) This testimony was allegedly beyond the scope of their expert reports and prejudiced plaintiffs.

The court is not persuaded. As defendants point out, plaintiffs never objected to this testimony at trial and, therefore, arguments pertaining to said testimony have been waived. *U.S. v. Bruteyn*, 373 Fed. Appx. 247, 250 (3d. Cir. 2010). Furthermore, even if objections to said testimony had been preserved, the testimony was merely explanatory in nature, and gave context for defendants’ experts’ understanding of the level of skill in the art. For example, plaintiffs now object to the fact that St. Pierre testified that the ‘535 patent discloses not only boron steel itself (a fact stated in his expert report), but that the boron steel can be hot formed to reach high strength¹¹ and that the patent discloses hot forging. (D.I. 229 at 5) However, the ‘535 patent was never used in asserting his obviousness opinions, and was only given as “important background.” (D.I. 245 at 755:5-7) This was made clear to the jury.¹² (*Id.*)

Plaintiffs suffered no prejudice from defendants’ experts’ testimony about the ‘535 patent and the Mohanty article. The references were mentioned, at least in part, in the experts’ written opinions. In addition, plaintiffs had ample opportunity to depose

¹¹ While this fact was not stated in his expert report, the boron steel in question has the same composition as steel that St. Pierre stated in his report can be hot formed to reach a high strength. (D.I. 230, ex. 1 at ¶¶ 19-20, 27, 28, 102) The difference is, he did not say in his report that the ‘535 patent discloses that boron steel can be hot formed to reach high strength.

¹² Even plaintiffs’ experts testified that defendants’ experts were relying on only three references to form their obviousness opinions. (D.I. 246 at 1095:19-22)

defendants' experts and cross examine them during trial. The Third Circuit has held that, under such circumstances, even if the experts' testimony was beyond the scope of the expert report, the error was harmless. *Mitchell v. City of Philadelphia*, 344 Fed. Appx. 775, 781 (3d Cir. 2009).

c. Testimony as to whether a mistake was made in drafting claim 7

Plaintiffs now argue that St. Pierre implicitly made a written description argument when he testified that there may have been a mistake in how the drafters of the '805 patent wrote claim 7.¹³ (D.I. 229 at 6) This argument is specious at best, as plaintiffs did not object to said testimony during trial. Moreover, the dialogue between St. Pierre and defendants' attorney implied that the proper reaction to the faulty drafting would be for the jury to find that the claim was not infringed, not that it was invalid. (D.I. 245 at 746:13-17)

2. Defendants' statements during closing

Plaintiffs make several objections to defendants' closing, claiming that defendants were erroneous in arguing that: (1) the jury was to decide if the Bano article was a "printed publication," and not whether it was publically available prior to the priority date of the '805 patent; (2) Laurent walked down the hall and talked to Hennechart when he needed to figure out how to solve the problem described by the '805 patent; (3) plaintiffs failed to disclose the Bano article to the Patent Office; and (4) plaintiffs failed to bring witnesses to trial. (D.I. 229 at 8-10)

¹³ The testimony is as follows: "Q: So the person who drafted the claim [7] may have made a mistake in how they drafted it? A: I think they did, yes." (D.I. 245 at 746:10-12)

Once again, as defendants point out, plaintiffs did not object to defendants' closing and, therefore, plaintiffs' objections are waived. *Murray v. Fairbanks Morse*, 610 F.2d 149, 152 (3d. Cir. 1979); *Argue v. David Davis Enters., Inc.*, Civ. No. 02-9521, 2009 WL 750197, at *20 (E.D. Pa. March 20, 2009). Moreover, even if plaintiffs had preserved their objections, their arguments are without merit.

First, the use of "printed publication" was not improper because the jury instructions clearly informed the jury that "[t]he statutory phrase 'printed publication' has been interpreted to mean that, **before July 9, 1998, the reference must have been sufficiently accessible to the public interested in the art.**" (D.I. 212 at 30) (emphasis added) Furthermore, defendants' closing included a similar instruction: "If you believe with us that [the Bano article] **was published before July of 1998 and that it includes every element of the invention**, this case is over." (D.I. 246 at 1153:18-20) (emphasis added) Far from prejudicial, defendants' repeated use of "printed publication" during closing was appropriate for the case.

Second, plaintiffs' complaint that defendants characterized plaintiffs' inventive process as "walking down the hall" is less than compelling. Saying that one of the inventors "walked down the hall" is, at worst, a figure of speech and in no way improperly prejudiced the plaintiffs. If their complaint is actually that defendants' closing misquoted the inventors' testimony, the closing was simply a paraphrasing, not meant to be taken literally. See *Perry v. US Dep't of Energy*, Civ. No. 05-3634, 2008 WL 161679, at *3 (N.D. Ill. Jan. 14, 2008) ("A paraphrase of trial testimony would have been sufficient for closing arguments.").

Third, it was not inappropriate for defendants to point out that the Bano article was not before the PTO during the examination of the '805 patent. Contrary to plaintiffs' assertion, this information is not "relevant only to a defense of alleged inequitable conduct." (D.I. 229 at 8) Even before *Microsoft v. i4i Ltd. Partnership*, 131 S.Ct. 2238 (2011), prior art that was not before the examiner when the patent issued was given different weight than art that was. When prior art was before the examiner, a proponent of invalidity had the additional burden of overcoming the presumption that is due a qualified government agency presumed to have properly done its job. *Tokai Corp. v. Easton Enters., Inc.*, Civ. No.2010-1057, – F.3d –, 2011 WL 308370, at *6 (Fed. Cir. Jan.31, 2011) (citations omitted) The inverse of this edict was that, if the prior art was not before the examiner, the proponent did not have an additional burden.

Finally, any prejudice that plaintiffs may have suffered stemming from defendants' comment about plaintiffs' failure to call witnesses to testify live was cured by multiple jury instructions. The members of the jury were told to make their "decision based only on the evidence that [they] saw and heard here in the courtroom . . . lawyers' statements and arguments are not evidence." (*Id.* at 3) Further mitigating plaintiffs' argument is the fact that the court instructed the jury that deposition "testimony must be given the **same consideration [they] would give it had the witness personally appeared in court.**" (D.I. 212 at 12) Considering that, even in criminal cases, parties are given "'considerable latitude' during closing arguments to argue evidence and to suggest that the jury may draw permissible inferences," plaintiffs were not so prejudiced by defendants' arguments as to require a new trial. *U.S. v. Hernandez*, 306 Fed. Appx

719, 723 (3d Cir. 2009).

3. Jury's construction of patent claims

Plaintiffs argue that the court erred by failing to construe two claim terms identified by plaintiffs' counsel in an email on the last day of trial. (D.I. 229 at 10-11) However, the email did not identify any limitations as being in dispute:

In the Court's order (D.I. 205), it instructed [plaintiffs] to identify and provide a construction for any claim terms about which the ordinary meaning is disputed. **After reviewing the record, [plaintiffs] do[] not believe that a dispute exists as to the ordinary meaning of "high resistance to corrosion" in claim 1 or "aluminum or aluminum alloy coating" in claim 7.** However, if the court would like to clarify the ordinary meaning of these terms to the jury, [plaintiffs] propose[] the following

(D.I. 229 at 10-11)¹⁴ (emphasis added)

With respect to the "coating" limitation of claim 7, plaintiffs continued to believe that there was no dispute as to the ordinary meaning of claim 7 until defendants asserted otherwise. (D.I. 246 at 1039:2-1040:5) Plaintiffs now contend that there was conflicting evidence presented to the jury during trial as to the meaning of the "coating" limitation in claim 7, yet this same evidence existed at the time of the above email. Because it was defendants, not plaintiffs, who identified a conflict over a term that had not been identified as being in contention during *Markman* proceedings, the court will

¹⁴ The court's order stated:

IT IS FURTHER ORDERED that, to the extent any claim limitations are in dispute and consistent with the court's standard practices, if parties do not agree on the "ordinary meaning" of a claim limitation it is plaintiffs' burden (for purposes of their affirmative infringement and validity contentions) to bring the dispute to the court's attention during the claim construction exercise. Having failed to do so, the parties will present their respective constructions during trial and the court will make its claim construction decision prior to the case going to the jury.

(D.I. 205 at 2-3)

not grant a new trial on plaintiffs' motion.

4. Jury instructions

Plaintiffs argue that the court erred by: (1) using the words "cold-rolled steel" to characterize defendants' products; (2) using the wrong claim construction; and (3) barring plaintiffs from asserting literal infringement at trial. (D.I. 229 at 15-17) Because plaintiffs present no new evidence or arguments as to why the court erred in its claim construction or its order that barred plaintiffs from asserting literal infringement, the court will not address these allegations. (*Id.*)

As for the court's use of "cold-rolled steel" to characterize defendants' products, plaintiffs were not unduly prejudiced because of the fact that defendants' products **are** cold-rolled. As more fully explained in the court's January 4, 2011 order prohibiting plaintiffs from asserting literal infringement, cold-rolling is not "merely an 'additional step' - it is a prerequisite to defendants' coating and thermal treatment steps." (D.I. 205 at ¶ 2) Plaintiffs' product is hot rolled to its final thickness whereas defendants' is cold rolled. (*Id.*) It was plaintiffs' burden to show the jury that a hot-rolled steel product is the equivalent of a cold-rolled steel product, a burden which they failed to carry.

V. CONCLUSION

For the foregoing reasons, the court denies plaintiffs' renewed motion for JMOL (D.I. 226) and denies plaintiffs' motion for a new trial (D.I. 228).¹⁵ An appropriate order shall issue.

¹⁵ Defendants' Rule 50(a) motion for JMOL of noninfringement of the patents in suit (D.I. 211) is denied as moot.