United States District Court, D. Delaware.

Dr. William B. DRAGAN,

Plaintiff.
v.
L.D. CAULK CO., Division of DENTSPLY INTERNATIONAL, INC, Defendants.

CIV.A. No. 84-707-JJF

April 21, 1989.

Arthur T. Fattibene, of Southport, Connecticut. Taylor W. Hanavan, of Connolly, Bove, Lodge & Hutz, Wilmington, Del., for plaintiff.

Albert W. Preston, Jr., of Woodcock, Washburn, Kurtz, Mackiewicz & Norris, Philadelphia, Pa., Edward J. Hanson, Jr., of Dentsply International, Inc. Henry N. Herndon, Jr., of Morris, James, Hitchens & Williams, Wilmington, Del., for defendants.

OPINION

FARNAN, District Judge.

This patent infringement action is before the Court on post-trial motions following a four week jury trial, verdict, and the Court's Final Order of Judgment entered on January 29, 1988. This Opinion will resolve all the outstanding motions in the case except for the parties' cross motions for sanctions and the plaintiffs' most recent motion for attorneys' fees and increased damages. The plaintiffs' motions at issue here include a motion for partial judgment notwithstanding the verdict ("JNOV"), a partial new trial, and a motion to alter and/or amend the Court's Order. Defendants have similarly made motions for partial JNOV and to alter and/or amend the Court's Order.

FACTUAL BACKGROUND

The trial in this matter consolidated two separate patent cases, *Dragan v. Caulk* and *Dentsply v. Centrix*. FN1 Issues at trial focussed on multiple patent claims which arose out of three patents, including U.S. Patent Nos. 3,581,399 (the " '399" patent) and 4,198,756 (the " '756" patent) which are the subject of these post-trial motions. Also at issue were several non-patent claims: misappropriation of trade secrets, unfair competition, and the breach of and tortious interference with an implied contract.

The patented inventions in the case are a compule syringe and other materials for use in dental procedures. The lawsuit began when Dentsply International sued Centrix, Inc., for a declaratory judgment of invalidity and non-infringement of three Centrix patents including the '756 and the '399 patents. Centrix counterclaimed alleging infringement and unfair competition against Dentsply. Thereafter, Dr. Dragan sued

the Caulk Company for infringement of the '756 patent and unfair competition. Caulk countersued requesting a declaratory judgment of invalidity and non-infringement of the '756 patent and alleging unfair competition and deceptive trade practices.

Plaintiffs requested a jury trial. To prevent problems of confusion or mistake the Court permitted the jurors to take notes throughout the month-long trial and instructed the jury from a 69-page charge which covered the spectrum of claims and issues in the case. As a further guide to the jury, the Court submitted a detailed verdict form containing 56 interrogatories for jury response. The verdict form was the result of a joint submission by the parties and significant revisions by the Court and the parties. The history of the verdict form is representative of the proceedings in this case and shall be detailed below.

Plaintiffs' objections to the jury interrogatories (Docket Item "D.I." 318 at 1) imply that plaintiffs were not given a sufficient opportunity to submit proposed interrogatories. This was not the case. Plaintiffs' counsel, a solo practitioner, advised the Court during trial that he would be unable to meet the deadline for submission of each party's proposed interrogatories. Plaintiffs thereafter agreed to take part in a joint submission of proposed interrogatories which were first filed in open Court by the defendants (D.I. 308), and revised five days later (D.I. 311). Subsequently, plaintiffs informed the Court that they had additional objections to certain elements of the interrogatories, whereafter the Court permitted plaintiffs to file formal objections. In response to the plaintiffs' objections, the Court again permitted counsel for all parties to rectify any alleged defects in the verdict form, and submit to the jury a revised verdict form, agreed to by both parties, after the jury had already begun to complete the first verdict form. (D.I. 323 at 3896-3897). Both parties had ample leave to object to, move to amend or revise the structure and content of the verdict form and other information received by the jurors.

The jury's verdict regarding the '399 patent, claim 10, was in favor of the defendants. The jury found that the Caulk Compule tip did not infringe claim 10, and that claim 10 was obvious by virtue of prior art. (D.I. 319, interrogatories ("ints.") 1, 2, 4, 5, 9, 10, 11a, 11b, 11c). The jury also found, however, that neither Dr. Dragan nor his attorneys acted in bad faith or with gross negligence during the prosecution of claim 10 by failing to submit certain known prior art to the U.S. Patent and Trademark Office ("PTO"). (D.I. 319, int. 11d). As to claims 1-3 of the '399 patent, the jury found that plaintiffs were precluded from asserting infringement by any device with a barrel design like the one used in the Caulk syringe, Exhibit P-5 at trial. (D.I. 319, int. 29). The jury's verdict on the '756 patent was essentially in favor of the plaintiffs. The jury found that the Caulk Compule syringe (new design) did infringe claims 1 and 2 of the '756 patent and that Dr. Dragan was not barred from asserting claim 1 by prosecution history estoppel. (D.I. 319, ints. 12-15, 20-22). The jury awarded plaintiffs \$925,000.00, but did not find that the infringement was willful. (D.I. 319, ints. 27-28).

With respect to the non-patent issues, the jury found that Caulk did not disclose, nor did Dentsply improperly acquire or use any Dragan trade secrets. (D.I. 319, ints. 40-49). The jury also found that neither Centrix nor Dragan acting on Centrix's behalf asserted Centrix' right to enforce the '756 patent. (D.I. 319, ints. 50-51). Finally, the jury found that neither Centrix, Dragan, nor their attorneys acted falsely or negligently by representing a right to assert the '756 patent, making false representations to the U.S. Courts or urging unsupported positions during trial. (D.I. 319, int. 54). Within this context the parties now move for a partial new trial, partial JNOV, and to alter and/or amend the judgment.

DISCUSSION

I. PLAINTIFFS' MOTIONS

A. Plaintiffs' Motion for Partial JNOV And Partial New Trial

The grounds for plaintiffs' motions for JNOV and new trial are identical. Accordingly, these motions will be discussed in tandem. The plaintiffs' grounds for relief are as follows:

1. Regarding patent '399, plaintiffs contend that as to claim 10 the weight of the evidence is contrary to the jury's verdict, and assert that claim 10 is valid and infringed; as to claims 1-3 plaintiffs contend that they are not precluded from asserting these claims and allege that the jury instructions and interrogatories on this issue were faulty.

2. Regarding the non-patent claims, plaintiffs contend that a directed verdict on certain of these issues was error because they presented sufficient evidence to submit all non-patent claims to the jury. In addition, regarding the misappropriation-of-trade-secrets claim submitted to the jury, plaintiffs allege that a lack of instructions on trade secrets confused the jury, permitting them to find in favor of the defendants.

The relevant inquiry upon a motion for JNOV is whether, in the court's judgment, the jury's verdict was supported by substantial evidence. Schering Corp. v. Precision-Cosmet Co., Inc., 614 F.Supp. 1368, 1371, 227 U.S.P.Q. 278 (D.Del.1985), Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1571, 1 P.Q.2d 1081 (Fed.Cir.1986) citing Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 619 (Fed.Cir.) *cert. dismissed* 474 U.S. 976 (1985). "Substantial evidence" has been defined as relevant evidence from the record which, when reviewed as a whole, would reasonably support the jury findings under review. Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 893, 221 U.S.P.Q. 669 (Fed.Cir.) *cert. denied* 469 U.S. 857 (1984). "Substantial evidence" does not refer to the amount of evidence presented to the court but rather to the substance or nature of the evidence and whether that evidence would reasonably support the jury's verdict, the motion for JNOV should be denied. Courts are not free to weigh evidence, pass on credibility of witnesses or substitute the court's judgment of the facts for that of the jury. Aloe Coal Co. v. Clark Equipment Co., 816 F.2d 110, 113 (3d Cir.) *cert. denied ---* U.S. ----, 108 S.Ct. 156 (1987).

JNOV is an extraordinary remedy, especially when the motion is made by an unsuccessful plaintiff who bore the burden of proof at trial. Stainton v. Tarantino, 637 F.Supp. 1051, 1075 (E.D.Pa.1986) A court should grant a motion for JNOV only if allowing the verdict to stand would result in manifest injustice. *Id.* In a patent infringement case, the rebuttable presumption of patent validity passes the burden of proof on validity to the defendant. 35 U.S.C. s. 282. The specific grounds for JNOV must have been raised in a motion for directed verdict. Bonjorno v. Kaiser Aluminum & Chemical Corp., 752 F.2d 802 (3d Cir.1985) *cert. denied* 477 U.S. 908 (1986). An objection to a jury instruction, for example, may not be raised for the first time on a motion for JNOV. Shatterproof Glass Corp., 758 F.2d at 619 n. 1.

Motions for new trial are entirely within the district court's discretion. Gutzan v. Altair Airlines, Inc., 766 F.2d 135 (3d Cir.1985) District courts will generally grant such a motion only if some grievous error occurred during trial which rendered the trial unfair. In addition, some prejudice to the moving party should be shown. Orthokinetics, 806 F.2d at 1581-82. Even in the case of grievous error, however, courts are not inclined to grant such motions where the moving party made no effort to bring the alleged error to the Court's attention at the time it occurred. Shushereba v. R.B. Industries, Inc., 104 F.R.D. 524 (W.D.Pa.1985).

For the reasons discussed below, the Court will deny the plaintiffs' motions for JNOV and new trial on each of the grounds stated in their motions.

1. Plaintiffs' motion for partial JNOV or new trial regarding Patent '399

a. Patent '399, Claim 10

Plaintiffs have two objections to the verdict regarding claim 10. First, plaintiffs contend that the defendants did not meet their burden of rebutting the presumption of patent validity. Defendants, however, presented evidence at trial that the obviousness of claim 10, by virtue of prior art, rendered claim 10 invalid and therefore not infringed. Defendants' expert, Dr. Glenn, testified that the Kerr, Coe and Caulk tips were similar to claim 10 of plaintiffs' '399 patented product in that all were plastic, tapered, curved and had a flange for using the tips with a syringe. (*See* TT, Glenn at 2800-2818; Defendants' exhibits 292 (Kerr tip), 215 (Coe tip), 175-A (Caulk tip)). Dr. Glenn further testified that all three were available in the market to the dental profession prior to 1968. (*See* TT at 2800-2818). Deposition testimony of Mrs. Gertrude Schwed, President of Schwed Company from 1977 to the present, which was read into the record at trial indicated that the Dent-o-lux tubes bearing the same characteristics as the tips described above, had also been sold in the dental market from the early 1960's. (*See* TT at 2926-2933). Because the Court finds that this evidence was substantial within the meaning of *Orthokinetics* and *Perkin-Elmer*, the Court will deny the plaintiffs' motions for JNOV or new trial on this ground.

Plaintiffs second objection regarding claim 10 goes to the form of the jury interrogatories on this claim. (*See* D.I. 319, int. 10). Plaintiffs allege that the verdict form was not structured to elicit the factual findings with respect to obviousness as required by 35 U.S.C. s. 103 and Graham v. John Deere Co. of Kansas, 383 U.S. 1 (1966). This objection is entirely without merit.

The trial court has broad discretion to determine the form of verdict to be submitted to the jury. Allen Organ Co. v. Kimball Int'l, Inc., 839 F.2d 1556, 1561-63 (Fed.Cir.) *cert. denied* --- U.S. ----, 109 S.Ct. 132 (1988). The trial court's discretion with respect to the verdict form extends to the issue of obviousness. Shatterproof Glass, 758 F.2d at 627 (quoting Structural Rubber Products Co. v. Park Rubber, 749 F.2d 707, 720, 223 U.S.P.Q. 1264 (Fed.Cir.1984). The trial court may submit a general verdict form accompanied by specific instructions or a specific verdict form based on detailed interrogatories that require jury responses to each of the underlying factual bases of the verdict. *Id. Graham*, interpreting 35 U.S.C. s. 103, outlines the general factual inquiry which should be undertaken with respect to obviousness.

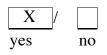
While the ultimate question of patent validity is one of law, ... the s. 103 condition ... lends itself to several basic factual inquiries. Under s. 103, the scope and prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others may have relevancy.

Graham, 383 U.S. at 17-18.

In this case, as noted above, the Court's 69-page charge to the jury included specific instructions on each of the issues and legal theories raised at trial. (D.I. 310). The instruction on obviousness literally parrots the inquiry which was recommended by *Graham*. Furthermore, the 56 interrogatories in the verdict form required the jurors to respond to multiple questions on each of the various patent and non-patent issues,

thereby eliciting significant factual findings. The jury interrogatory with respect to obviousness was as follows:

10. Do you find that Defendant Dentsply has proven by clear and convincing evidence that claim 10 of the Dragan '399 patent is invalid on the ground that it was obvious prior to August 8, 1969 to make an article as set forth in claim 10?



Moreover, the Court permitted both parties to revise the interrogatories several times before submitting the verdict form from which a verdict was entered on July 24, 1987. The Court finds that both the jury charge and the verdict form were agreed to by both parties, and comply with the standard set by the Federal Circuit. Therefore, the plaintiffs' motion for JNOV or new trial on this ground will be denied.

b. Patent '399, Claims 1-3

Plaintiffs allege that the jury found plaintiffs were precluded from asserting claims 1-3 because the Court failed to give an instruction defining "estoppel". Plaintiffs also object to the structure of the jury interrogatories on preclusion. The day before the Court instructed the jury, plaintiffs submitted additional proposed jury instructions relating to estoppel. The Court did not give these additional instructions, however, because the Court found that the newly proposed instructions merely repeated existing instructions. (D.I. 345 at 3809-10).

At trial, the Court charged the jury on the subject of patent prosecution history estoppel, an instruction which incorporated an explanation of the legal theory of estoppel (D.I. 310 at 34-35). FN2 Furthermore, the jury interrogatories regarding whether the plaintiffs should be precluded from asserting claims 1-3 were clear without an instruction defining estoppel. Interrogatory 29, to which the jury answered in the affirmative, does not employ the word estoppel:

Alleged Infringement of Claim 1-3 of the '399 Patent by the Caulk Compules Syringe and the Prisma Shield Device

29. Do you find that Plaintiffs are precluded from asserting that claims 1-3 of the '399 patent are infringed by a device having a barrel design like the Caulk Compule Syringe, Exhibit P-5, in view of the several sworn admissions by Centrix of non-infringement of the '399 Patent? (D.I. 319)

Thus, the jury was not required to answer an interrogatory containing undefined legal terminology.

The Court concludes that the jury was instructed on the meaning of estoppel within the instruction on patent prosecution history estoppel. Moreover, since the Court finds that interrogatory 29 was independently clear, the Court's explanation of estoppel was superfluous with respect to preclusion. Accordingly, the Court will deny the plaintiffs' motions for JNOV and new trial on this ground. FN3

2. Plaintiffs' Grounds for JNOV or New Trial Regarding the Non-Patent Claims

a. Jury Verdict On Misappropriation of Plaintiffs' Trade Secrets

Plaintiffs allege that (1) defendants failed to introduce evidence to substantially rebut the plaintiffs' evidence that defendants misappropriated plaintiffs' trade secrets and (2) the Court failed to instruct the jury as to Delaware law regarding trade secrets, so that the jury did not understand the nature of the misappropriation claim. Plaintiffs allege that if the jury had been properly instructed as to Delaware law on this issue, they would have understood the claim and would not have found for the defendants based on the evidence presented.

For the reasons stated below, the plaintiffs' motion for JNOV and new trial on the grounds of an improper verdict on the misappropriation claim will be denied. Unlike the issue of patent validity, for which the defendants have the burden of proving invalidity, plaintiffs have the burden of proving misappropriation. Therefore, defendants had no obligation to rebut the plaintiffs' evidence. Further, the Court finds the evidence adduced at trial to be sufficient to reasonably support a jury verdict in defendants' favor. For example, Dr. Glenn, defendants' expert, testified that kits containing the materials necessary for special procedures were common in the medical professions including dentistry, dating back to the 1920's. (TT, Glenn at 2834-36). In addition, Dr. Glenn testified that transparent plastic, tapered, sealed, pre-filled tubes for use in conjunction with a dental injection gun were sold by Caulk for use in the dental profession also as early as the 1920's. (TT, Glenn at 2834-48). Thus, evidence at trial supported the jury finding that the trade secrets allegedly misappropriated by defendants had in fact been long known by the dental profession and by Caulk.

Second, the plaintiffs assert that the jury failed to understand their misappropriation-of-trade-secrets claim because the Court did not instruct the jury on Delaware law with respect to trade secrets. This claim is without merit. The jury interrogatories relevant to the plaintiffs' trade secrets claims, interrogatories 40-49, indicate that the jury understood the nature of this claim. The jury answered affirmatively that using pre-filled tubes for dental materials was generally known in the dental community prior to the relevant time period, April 1978. The jury also found that Caulk in particular knew that the dental trade used kits containing syringes and other materials prior to this time period. (*See* D.I. 319, ints. 40-42). The letter in which plaintiffs allege Caulk acquired certain trade secrets, a letter from Discko to Burgelt sent in April 1978, discussed the information which the jury found was already known to Caulk and the general dental profession. Having made this finding, the jury found that the defendants acquire or disclose any other trade secrets. (D.I. 319, ints. 47-49). Plaintiffs' misappropriation claim was straightforward and clearly presented to the jury in the interrogatories. Further, the plaintiffs in the present application have failed to provide any support for their claim that the jury did not understand this issue. FN4 Thus, plaintiffs' motions for new trial or JNOV on this ground will be denied.

b. Directed Verdict in Favor of Defendants on Plaintiffs' Claims of Breach of Implied Contract, Tortious Interference with Contract and Certain Alleged Acts of Unfair Competition

Plaintiffs contend that the evidence introduced at trial justified submission to the jury of plaintiffs' claims concerning breach of an implied contract, tortious interference with contract and certain other alleged acts of unfair competition. Plaintiffs argue, therefore, that the Court erred in granting defendants' motion for a directed verdict on these issues.

A directed verdict may be granted whenever the evidence, viewed in the light most favorable to the nonmoving party, clearly establishes as a matter of law that the non-moving party is not entitled to relief. McGlinchey v. Hartford Accident and Indemnity Co., 866 F.2d 651 (3d Cir.1989). Based on the lack of evidence on these claims at trial, the Court concluded that as a matter of law the plaintiffs were not entitled to judgment on these claims. Plaintiffs have not pointed to any additional evidence at this juncture which would require a different result. Thus, the Court will deny plaintiffs' motions for JNOV or new trial on these issues.

B. Plaintiffs' Motion To Alter And/Or Amend the Court's Order

Plaintiffs move to alter and/or amend the Court's January 29, 1988 Order on the same grounds stated in support of their motions for JNOV and new trial, and also move to alter and/or amend the Order on several additional grounds.

A motion pursuant to Fed.R.Civ.P. 59(e) is a matter for the district court's discretion. Robinson v. Watts Detective Agency, 685 F.2d 729, 742-43 (1st Cir.1982) *cert. denied* 459 U.S. 1105 (1983). The district court should deny a motion to alter and/or amend a final judgment when, in order to grant the relief sought, the court would have to re-examine the facts found by the jury and find liability when the jury had found none. *Id*.

1. Motion To Alter And/Or Amend Order Based On Grounds Discussed Above

With respect to the plaintiffs' motion to alter and/or amend the final judgment based on the grounds discussed above with respect to plaintiffs' motions for JNOV and new trial, the Court finds that to grant the relief sought on these grounds would require a re-examination of the facts and finding of liability where the jury found none. Further, the Court rejected these objections after considering them in a more substantive analysis in the motions discussed above. Therefore, as a matter of the Court's discretion, plaintiffs' motion to alter or amend the Order on these grounds will be denied.

2. Motion To Alter And/Or Amend On Additional Grounds

The additional issues for which the plaintiffs seek to alter and/or amend the final judgment focus on the following: defendants' bad faith or gross negligence; attorneys fees; pre- and post-judgment interest; the portion of patent '756 referred to as "the tips"; and whether the jury dismissed patent '399 claims 1-9 with prejudice. These issues will be discussed *seriatim*.

a. Plaintiffs' Bad Faith or Gross Negligence

Plaintiffs request that the final judgment include the finding contained in the jury's response to interrogatory 11(d) that neither Dr. Dragan nor his attorney acted with bad faith or gross negligence in failing to submit to the PTO known prior art which was material to patent '399. The plaintiffs' motion on this ground conforms to the jury verdict and shall therefore be granted. (See further discussion in Part II, Section A.2.a. of this Opinion)

b. Attorneys' Fees

Plaintiffs request that the final judgment include the finding reflected in jury interrogatory 55 that defendants are not entitled to an award of attorneys' fees. This application also conforms to the verdict and shall be granted.

c. Pre- and Post-Judgment Interest

Plaintiffs request that the final judgment specify that pre-judgment interest continue from March 1, 1982, the date set by the Court for the initial pre-judgment interest calculation, through the date that final judgment was entered on January 29, 1988. However, defendants' motion to alter and/or amend the final Order requests that interest not be imposed on the full amount of the damage award from the first date that infringement was found. For the reasons discussed below in Part II, B of this Opinion, the Court will grant defendants' motion to alter and/or amend the Order with respect to pre-judgment interest. Therefore, the Court will deny plaintiffs' motion on this issue.

Plaintiffs request that the final judgment order that plaintiffs be paid post-judgment interest to which they are entitled under 28 U.S.C. s. 1961 (as amended 1982, 1983, 1986). Section 1961 authorizes payment of interest from the date of the entry of judgment and specifies how the rate at which such interest should be calculated. Post-trial motions challenging the award do not alter the date from which interest begins to run if the award of damages on which the interest would be based is ultimately upheld. *Ohio-Sealy Mattress Mfg. Co. v. Sealy, Inc.*, 585 F.2dd 821, 8845-47, 200 U.S.P.Q. 337 (7th Cir.1978) *cert. denied* 440 U.S. 930 (1979). Because the Court will uphold the jury's damage award for the reasons discussed in Part II, B, the plaintiffs' application with respect to post-judgment interest will be granted.

d. The Portion of Patent '756 Referred to as "Tips"

Plaintiffs request that paragraphs 5 and 7 of the Court's January 29 Order include the word "tips" to identify the complete or whole device reflected in patent '756, claims 1-3, which the jury found to be infringed. Further, plaintiffs contend that the tips are an integral part of patent '756, claims 1-3, and therefore request that paragraph 8 of the final judgment grant an injunction against the tips to continue until the plaintiffs are fully compensated for the infringement of '756.

A review of the jury interrogatories relevant to the tips, however, vitiates the contention that the jury found the defendants to have infringed patent '756 with regard to the tips. (*See* D.I. 319, int. 12). Plaintiffs claimed that Caulk's Compule tip infringed the '399 patent claim 10. The jury found that it did not. (D.I. 319, ints. 1-2, 4-5, 9). On the other hand, the jury did find that the Caulk Compule syringe (new design) infringed the '756 patent claims 1 and 2. (D.I. 319, int. 22). The jury made no findings with respect to the tips in connection with the '756 patent. The jury's award and the subsequent Court Order favorable to the plaintiffs were entered only with respect to the '756 patent. Thus, plaintiffs' attempt to obtain an award or Court Order in their favor with respect to the tips, a claim submitted to the jury under the '399 patent, is contrary to the jury's verdict. To alter and or amend the Order as requested would require the Court to re-examine the facts and find liability where the jury found none. Therefore, this application will be denied.

e. Status of Dismissal of Patent '399, Claims 1-9

Plaintiffs contend that the jury verdict dismissed patent '399, claims 1-9, with prejudice. The jury interrogatories do not contain any explicit findings with regard to the status of dismissal of claims 1-9. In fact, the verdict form does not contain any findings regarding claims 4-9. Accordingly, any application with respect to these claims or the status of dismissal will be denied.

II. DEFENDANTS' MOTIONS

A. Defendants' Motion for Partial JNOV

Defendants' motion for partial JNOV states a variety of grounds for relief which focus on the jury's finding of validity, infringement and the award of damages with respect to patent '756. Defendants also object to the jury verdict on two non-patent issues. More specifically, defendants' motion for JNOV alleges that (1) no evidence supports the jury's damage award for infringement of the '756 patent, claims 1-3; (2) the weight of the evidence requires a judgment contrary to the jury's findings with respect to plaintiffs' bad faith or negligence in prosecuting the '399 patent, the validity and infringement of patent '756, and whether plaintiffs committed unfair trade practices against the defendants; and (3) plaintiffs' false representations with respect to patent '756 injured defendants entitling them to damages and attorneys' fees. The legal standard for JNOV relief, discussed above in Part I of this Opinion, shall not be repeated here. The grounds for this motion will be discussed *seriatim*.

1. Evidence Supports the Damage Award for the '756 Patent

Defendants allege that plaintiffs failed to present any evidence to support the amount of the jury's award of damages as a reasonable royalty for infringement of the '756 patent. In the alternative, defendants argue that the jury awarded damages for Centrix's lost profits and such an award was improper because Centrix was not a plaintiff in the case with respect to the '756 patent. The relevant inquiry here is whether the jury's award of damages was supported by "substantial evidence". Orthokinetics, 806 F.2d at 1571. For the reasons discussed below, the Court finds that the plaintiffs presented substantial evidence to support the jury's damage award as a reasonable royalty and that Centrix was a plaintiff in the case with respect to the '756 patent. Therefore the defendants' JNOV motion on damages will be denied.

Whenever the jury finds that a patent has been infringed, the patent owner is entitled to an award of damages which adequately compensates the owner for that infringement and which is not less than a reasonable royalty for the infringer's use of the patent. 35 U.S.C. s. 284. What constitutes a "reasonable royalty" depends on the evidence presented and the particular facts of each case. See Radio Steel & Mfg. Co. v. MTD Products, Inc., 788 F.2d 1554, 1557 (Fed.Cir.1986). The trier of fact has broad discretion in determining a reasonable royalty. Georgia-Pacific Corp. v. United States Plywood Corp., 318 F.Supp. 1116, 1120, 166 U.S.P.Q. 235 (S.D.N.Y.1970), *modified*, 446 F.2d 295 (2d Cir.), *cert. denied*, 404 U.S. 870 (1971). The fifteen factors outlined in the *Georgia-Pacific* case subsequently have been used as a general guide of the factual information necessary to determine a reasonable royalty. FN5 Trans-World Mfg. Co. v. Al Nyman & Sons, Inc., 750 F.2d 1552, 1568 (Fed.Cir.1984); Railroad Dynamics, Inc. v. Stucki Co., 727 F.2d 1506, 1518, 220 U.S.P.Q. 929 (Fed.Cir.) *cert. denied* 469 U.S. 871 (1984); Deere & Co. v. International Harvester Co., 710 F.2d 1551, 1559, 218 U.S.P.Q. 481 (Fed.Cir.1983); Hanson v. Alpine Valley Ski Area, Inc., 718 F.2d 1075, 1077, 219 U.S.P.Q. 679 (Fed.Cir.1983). No cases have relied on all fifteen of these factors. Therefore, to support an award of damages based on a reasonable royalty, a party must adduce evidence only with respect to the factors relevant in that case.

At trial, plaintiffs presented evidence with respect to the following: the parties' actual negotiations for a license under the '756 patent which took place in 1981; the contemplated nature and scope of the license being negotiated in 1981; the profits anticipated by Dragan as the prospective licensor; the amount of profits anticipated by Caulk as the licensee; that Dragan considered Caulk a competitor; the effect the patented syringe may have had on Dragan's collateral product sales; the remaining duration of the '756 patent and the contemplated term for the license; the advantages and unique characteristics of the '756 patent over other prior devices; evidence of a substantial customer preference for the product made under the '756 patent and that there were no acceptable non-infringing substitutes; the extent to which Caulk made use of the

invention in the '756 patent and the value to Caulk of that use; and finally the alleged actual profit to Caulk that should be credited to the '756 patent.

The Court finds that the evidence described above and presented at trial covered eleven of the fifteen potentially relevant factors used to determine a reasonable royalty. *See Georgia-Pacific* factors 3-11, 13, and 15. Thus, contrary to the defendants' assertion, plaintiffs did present evidence to support a reasonable royalty. Moreover, the Court concludes that the evidence described in the synopsis above is substantial evidence within the meaning of the standard for JNOV relief in a patent case. (*See* Part I of this Opinion). The Court concludes that the jury's award of damages was not for lost profits but rather based on the evidence presented with respect to a reasonable royalty. Thus, the Court will uphold the damages awarded by the jury and will deny the defendants' JNOV motion on this ground.

2. Weight of the Evidence Arguments

a. Plaintiffs' Bad Faith or Gross Negligence

The jury found claim 10 of patent '399 to be invalid based on obviousness by virtue of prior art known to the plaintiffs but not presented to the PTO. (D.I. 319, ints. 10-11c). Defendants contend that this finding contains the implicit finding that the prior art which plaintiffs failed to present to the PTO was more material to the patent claim than the prior art which plaintiffs did present, that plaintiffs intended to deceive the PTO and, therefore, the plaintiffs were guilty of bad faith or gross negligence. Such additional findings, however, are contrary to explicit jury findings. (D.I. 319, int. 11d). Defendants ask that the final judgment on this issue not be enforced, or in other words, that the Court disregard the jury's finding contained in the verdict form and make its own conclusions with regard to the weight of the evidence presented. However, as stated above, the Court's obligation on a motion for JNOV is not to weigh the evidence as if there had been no trial before a jury. Rather, the Court should determine whether the jury's decision was based on substantial evidence, and if the Court so finds it should deny the motion for JNOV.

Defendants base their argument on plaintiffs' alleged failure to present evidence that they did not behave in an inequitable manner. Defendants' argument exhibits two flaws. The initial problem with this argument is that it was defendants' burden, not plaintiffs', to prove this claim by clear and convincing evidence. Plaintiffs' had no obligation to rebut defendants' evidence or to present any evidence at all. As long as the defendants failed to present sufficiently clear and convincing evidence at trial the jury could reasonably find in favor of the plaintiffs. Moreover, evidence adduced at trial supports the jury's finding that the plaintiffs were not liable on this claim. The prior art which the plaintiffs did present to the PTO may have persuaded the jury that the '399 patent, claim 10, was obvious regardless of other prior art not presented. Plaintiffs also presented evidence to suggest that they did not submit the prior art at issue here to the PTO because they did not believe it was relevant. (*See* testimony of Dr. Dragan on the Kerr, Coe, and Dent-o-lux tips at Trial Transcript pp. 3435-3450.) Finally, plaintiffs' exhibit 11 indicates that the defendants similarly failed to cite the Kerr, Coe or Dent-o-lux tips in their own patent prosecution, suggesting that the defendants did not believe it was relevant either.

The second problem with defendants' argument is that it would require the Court to reach this attenuated conclusion by ignoring the jury's findings. The jury found that claim 10 of patent '399 is invalid because of prior art known by the plaintiffs at the time the patent was prosecuted. Defendants contend that from this primary finding the Court may infer that the jury also found that the plaintiffs behaved with fraud or gross negligence contrary to the explicit finding in the jury's answer to interrogatory 11d. Defendants failed to

convince the jury of this claim at trial and the Court is reluctant on this record to set aside the jury's verdict and find liability where the jury found none. Therefore, the defendants' motion on this ground will be denied.

b. Validity and Infringement of the '756 Patent

Defendants make a similar argument with respect to the weight of the evidence presented at trial on claims 1-3 of the '756 patent. Defendants contend that the weight of the evidence requires a judgment that this patent is invalid and not infringed. However, as long as the Court finds that substantial evidence was presented to the jury to support its findings on this issue, the Court must deny the defendants' motion on this ground.

Defendants have a heavy burden in any patent case to prove invalidity since the presumption, as stated above, favors patent validity. The Court concludes that the evidence adduced at trial by plaintiffs was sufficient to support a decision of validity in favor of the plaintiffs.

The evidence to support validity at trial was as follows. The defendants' own in-house counsel wrote a validity opinion with respect to the '756 patent advising that defendants did not have a clear case of invalidity against it. (Plaintiffs' Exhibit P-490). Plaintiffs also presented substantial evidence as to the non-obviousness of the patented device. For example, the defendants' expert testified that he had never seen a device like the '756 patented syringe. (TT, Glenn at 2868-69). In addition, plaintiffs produced evidence at trial touching on the secondary considerations referred to in *Graham, supra*, with respect to non-obviousness, such as the commercial success of the device. (Plaintiffs' exhibit P-118). As to prior art, evidence at trial indicated that no one single reference of prior art was relevant to the '756 patent. (TT, Thompson at 3412; Schuyler at 3344-46). Defendants allege that elements from a variety of different sources in combination may have been relevant; the jury, however, found to the contrary.

With respect to infringement, plaintiffs submitted exhibits and testimony on which the jury could reasonably rely in finding that the defendants had infringed the '756 patent. (*See* Plaintiffs' exhibits 2A, 2AB, 2AC; TT, Thompson at 2182-2227). Evidence at trial suggested that after defendants' efforts to invent a composite syringe of their own failed, defendants copied plaintiffs' device. (TT, Webb at 2489-90; Plaintiffs' exhibit P-118).

The Court concludes that the jury's findings as to both the validity and infringement of the '756 patent were reasonable and that defendants failed to meet their burden to rebut the presumption of validity. Therefore, defendants' motion on this ground will be denied.

c. Plaintiffs' Unfair Trade Practices

Defendants contend that the weight of the evidence proved their claim that plaintiffs committed unfair trade practices to the detriment of the defendants. Specifically, defendants alleged at trial that Centrix improperly asserted a right to enforce the '756 patent in a concerted action with Dr. Dragan. Defendants ask for JNOV relief alleging that no evidence supports the jury's findings to the contrary in the jury responses to interrogatories 50-51. However, once again it was the defendants' burden to prove this claim, with a preponderance of the evidence.

Defendants apparently attempted to prove this claim primarily through a letter written by Mr. Symcak, President of Centrix, advising dealers that Centrix was the only authorized manufacturer of the '756 patented

device. The letter did not explicitly assert patent enforcement rights, although such an assertion might be inferred. The jury apparently did not infer that assertion and found in favor of the plaintiffs on this claim. Defendants contend that the jury misinterpreted the Symcak letter because of improper statements made by plaintiffs' counsel at summation. (TT, Fattibene at 3785). FN6 Defendants did not object to the summation, however, either during or immediately after it was given. Instead, defendants include this objection for the first time in a motion for JNOV relief. The Court concludes that the Symcak letter was reasonably subject to differing interpretations. Further, the jury was instructed at the commencement and conclusion of trial that statements and arguments by lawyers are not evidence and should not be considered in making jury findings. Finally, defendants failed to raise an objection to the summation at the appropriate time. For these reasons this motion will be denied. FN7

d. Plaintiffs Misrepresentations on the '756 Patent

Defendants' final ground for relief in its motion for JNOV, is that plaintiffs' alleged misrepresentations with respect to the '756 patent constituted frivolous and fraudulent litigation tactics. Defendants claim that as a result they were injured and have a right to damages and fees. Such a claim is inappropriate as a ground for JNOV relief. Both parties have filed voluminous briefs in support of motions for sanctions containing, *inter alia*, the claims stated above. The Court will address this claim when the motions for sanctions are resolved. Thus, the Court will deny JNOV relief on this ground.

B. Defendants' Motion to Alter and/or Amend the Order

Defendants' motion to alter and/or amend the Court's Final Order seeks relief on one issue. Defendants contend that the prejudgment interest awarded in paragraph 6 of the Court's Final Order was improperly calculated. Defendants argue that calculating interest on the entire amount of damages from the first date that infringement was found by the jury is an undeserved windfall to the plaintiffs. Prejudgment interest is ordered by the court, in its discretion, only to restore the recipient of damages to the position it would have been in had a reasonable royalty been paid for use of the patented invention. Defendants contend that the prejudgment interest ordered by the Court here converts prejudgment interest into an award of punitive damages.

Defendants' motion contends that prejudgment interest should be calculated on yearly sales based on the plaintiffs' evidence of sales beginning in March 1982. (D.I. 385, DeLomba Affidavit)

The Court concludes that the accounting method proposed by defendants more accurately reflects the appropriate amount of prejudgment interest necessary to restore plaintiffs to the financial position they would have been in but for defendants' infringement. Thus, defendants' motion to amend the Order on prejudgment interest is granted.

The parties shall submit a jointly stipulated, proposed form of order consistent with this Opinion on or before April 28, 1989.

FN1. For purposes of the trial and this Opinion, references to the plaintiffs or "Dragan" include Centrix, while references to defendants or "Caulk" include Dentsply, unless otherwise noted.

If the prosecution history reveals that a patent owner has surrendered claims, or has amended, narrowed or otherwise limited his claims in response to the rejection by the Patent and Trademark Office based on the prior art, he may not later recapture through the doctrine of equivalents what he has given up to distinguish over the prior art. When the holder of a patent has amended a claim by the inclusion of narrowing language in order to avoid prior art cited by the Patent and Trademark Office and thus obtains the issuance of a patent, he is precluded from attempting to enforce the claim in a manner that ignores the effect of narrowing language.

FN3. Plaintiffs also contend that estoppel could only preclude them from asserting claims 1-3 against Exhibit P-5 if they are precluded from asserting these claims at all. Plaintiffs argue that their statements which alleged non-infringement of claims 1-3 only did so as to Exhibit P-5 and they did not intend to allege non-infringement beyond that scope. However, interrogatory 29 refers to preclusion as to the barrel design which was incorporated in Exhibit P-5. Thus, if the jury found that plaintiffs' prior allegations of non-infringement were found to preclude them from asserting these claims against that barrel design, they would similarly be precluded from asserting these claims against any device containing that design. The jury found that plaintiffs' prior sworn statements precluded them from asserting claims 1-3, and accordingly, found that plaintiffs should be precluded from asserting these claims against the barrel design when used in any device.

FN4. Here again, the Court declined to give plaintiffs' additional instructions on trade secrets because the Court found that the substance of the additional instructions had already been given. (D.I. 345, at 3809-10).

FN5. The Georgia-Pacific factors are:

1. Royalties received for licensing the patent at issue

2. Rates paid by licensee for use of comparable patents

3. Nature and scope of contemplated license

4. Licensor's established policy and marketing program

5. Commercial relationship of licensee and licensor

6. The effect or value of the patented product in promoting or generating sales of non-patented items by the licensee and licensor and the extent of derivative sales

7. Duration remaining on the patent and license term

8. Established profitability, commercial success and current popularity of the patented product

9. Utility and advantages of patented product over old modes or devices

10. Nature of patent, character of commercial product, benefits to users

11. Extent of infringer's use, the value of that use

12. Portion of profit customary in the business to allow for the use of the invention

13. Portion of the realizable profit creditable to the invention, distinguished from non-patented elements

14. Opinion testimony of qualified experts

15. Amount that a licensor and licensee would have agreed upon if both had been reasonably and voluntarily trying to reach an agreement with respect to a royalty

318 F.Supp at 1120-21. FN6. Defendants object to the following two statements:

If I committed fraud on this Court, or on any other court, do you think I would be standing here today? TT at 3785, lines 1-3.

Mr. Symcak didn't know really what the patent situation was.... Mr. Symcak really had no knowledge other than that we were manufacturing under these patents. TT at 3785, lines 11-13, 16-18. FN7. Defendants seek to support their objection to the summation by attempting to impeach Mr. Fattibene's statements with his and Dr. Dragan's deposition transcripts. Those transcripts are not part of the trial record. Thus, neither the statements made by Mr. Fattibene at summation nor the alleged impeachment testimony at deposition were considered by the jury when it found in favor of plaintiffs on this issue. Accordingly, the

Court will not consider this evidence as it was not before the jury at the time of their verdict.

D.Del.,1989. Dragan v. L.D. Caulk Co., Div. of Dentsply Intern., Inc.

Produced by Sans Paper, LLC.