UNITED STATES DISTRICT COURT DISTRICT OF NEW JERSEY

HOWMEDICA OSTEONICS CORP.,

Plaintiff,

OPINION

V.

ZIMMER, INC., CENTERPULSE ORTHOPEDICS, INC.

Civ. No. 05-897 (WHW)(CLW)

Defendants.

Walls, Senior District Judge

This motion arises out of a patent dispute between Plaintiff Howmcdica Osteonics ("Howmedica") and Defendant Zimmer and Centerpulse Orthopedics ("Zimmer"). After eleven years of litigation, all four of Plaintiff's patents have been invalidated. Defendant Zimmer now moves for attorney fees and costs, expert costs, and prejudgment interest under 35 U.S.C. § 285. Zimmer seeks to recover \$13,496,086.86 in fees, \$513,258.38 in costs, \$1,016,599.29 in expert costs, and \$5,821,225.69 in prejudgment interest. Defendant's motion for fees and costs is granted in part.

FACTUAL AND PROCEDURAL BACKGROUND

The long and complicated facts of this case have been fully recounted in the Court's previous opinions on Defendant's motions for summary judgment, ECF Nos. 176, 247. In short, this case arises out of a patent dispute over a series of related patents filed by Plaintiff Howmedica. These patents disclose processes for irradiating and heating polymers used in medical implants which are intended to increase the usable life of the implants. Irradiating and

1

heating polymer is commonly used to sterilize and strengthen polyethylene, but this process creates atoms and molecules with unpaired electrons in their outermost electron shell known as "free radicals." These free radicals can cause oxidation and accelerated wear of the polymer if exposed to oxygen. However, if the polymer is irradiated in an inert atmosphere, the free radicals will become "crosslinked" and the polymer will exhibit superior wear characteristics. The patents at issue teach a process for heating and irradiating ultra-high-molecular-weight polyethylene (UHMWPE) in an inert atmosphere using specific time and temperature combinations to maximize crosslinking and decrease oxidation and wear.

Defendant Zimmer is a manufacturer and marketer of medical implant products. In 2005, Plaintiff brought this action against Defendant for the alleged infringement of four of Howmedica's patents: U.S. Patent No. 6,174,934 ("the '934 patent), U.S. Patent No. 6,372,814 ("the '814 patent"), U.S. Patent No. 6,664,308 ("the '308 patent) and U.S. Patent No. 6,818,020 ("the '020 patent"). Compl., ECF No. 1.

On June 13, 2007, this Court granted Defendant's motion for partial summary judgment, finding the '934, '814, and '308 patents invalid for indefiniteness because of their failure to properly define a critical claim limitation, the "Arrhenius limitation." ECF No. 176. On August 19, 2008, this Court granted Defendant's motion for partial summary judgment, finding that Zimmer's products did not infringe claims 7, 10, 11 and 12 of the '020 patent. ECF No. 247. Upon Zimmer's request, the U.S. Patent and Trademark Office ("PTO") conducted an *inter partes* reexamination of the '020 patent and rejected all of the '020 patent claims over prior art. The Patent Trial and Appeal Board ("PTAB") affirmed in part and reversed as to claims 7-12. Both Howmedica and Zimmer appealed this decision to the Federal Circuit, which held that all of the '020 claims were invalid due to prior art. Final judgment was entered on July 27, 2016.

Order, ECF No. 424. Defendant Zimmer now moves for an award of fees, costs, expert costs and prejudgment interest associated with its eleven-year defense of this action.

LEGAL STANDARD

35 U.S.C. § 285 authorizes the Court to award reasonable attorney fees to the party prevailing in patent litigation in an "exceptional case." To satisfy the statute, Defendants must establish: (1) they are the prevailing party; (2) the case is exceptional; and (3) the fees are reasonable. *Machinery Corp. of America v. Gullfiber AB*, 774 F.2d 467, 471 (Fed. Cir. 1985). Defendants bear the burden to establish the exceptional nature of the case by a preponderance of the evidence. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1758 (2014).

"[A]n 'exceptional' case is simply one that stands out from others with respect to the substantive strength of a party's litigating positions (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." *Id.* at 1756. Exceptionality is determined by courts "in the case-by-case exercise of their discretion, considering the totality of the circumstance." *Id.* An award of fees may be justified where a case "present[s] either subjective bad faith or exceptionally meritless claims," or where a party has engaged in misconduct, whether or not that conduct is independently sanctionable. *Id.* at 1757. In assessing the totality of the circumstances, courts can consider "nonexclusive factors," including "frivolousness, motivation, objective unreasonableness (both in the factual and legal components of the case) and the need in particular circumstances to advance considerations of compensation and deterrence." *Id.* at 1756 n.6 (citing *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 534 n.19. (1994)). While "there is no precise rule or formula" for determining if a case is exceptional, *Octane Fitness*, 134 S. Ct. at 1756, "fee awards are not to be used 'as a penalty for failure to win

a patent infringement suit." *Gaymar Indus., Inc. v. Cincinnati Sub-Zero Prods., Inc.*, 790 F.3d 1369, 1373 (Fed. Cir. 2015) (citations omitted). Even if a district court determines that a case is exceptional, it remains within the court's discretion to deny a fee award based on its familiarity with the matter and the interest of justice. *Icon Health & Fitness, Inc. v. Octane Fitness, LLC*, 576 F. App'x 1002, 1005 (Fed Cir. 2014).

The parties dispute the appropriate standard to assess Plaintiff's conduct before the PTO. Defendants claim that the case may be exceptional even if inequitable conduct is not proved by clear and convincing evidence. Def.'s Br. at 19, n.5, ECF No. 436. Plaintiffs argue that because inequitable conduct must be proven by clear and convincing evidence to invalidate a patent, the same standard applies when determining whether a party's conduct before the PTO renders a case "exceptional." Pl.'s Opp. at 6, ECF No. 445.

To find inequitable conduct before the PTO, the Court must find by clear and convincing evidence that (1) the undisclosed reference was material and (2) the party acted with the specific intent to deceive the PTO. *Therasense, Inc. v. Becton, Dickinson, and Co.*, 649 F.3d 1276, 1290. To satisfy the materiality standard, defendant must show that the PTO would not have allowed the claim had it been aware of the undisclosed reference. *Id.* at 1291. To satisfy the intentionality prong, the moving party must demonstrate that the applicant knew of the reference, knew it was material, and made a deliberate decision to withhold it from the PTO. *Id.* The intent to deceive may be inferred from conduct, but only if it is "the single most reasonable inference" that can be drawn from the evidence. *Id.*

While the Federal Circuit has not addressed the standard to apply when considering conduct before the PTO for purposes of a fee award, the Supreme Court in *Octane Fitness*, *LLC* v. *ICON Health & Fitness*, *Inc.*, 134 S. Ct. 1749, 1758 (2014) unequivocally held that the

"preponderance of the evidence" standard applies in motions for attorneys' fees under section 285. The Court will apply the "preponderance of the evidence" standard to the Plaintiff's conduct before the PTO. See DietGoal Innovations LLC v. Chipotle Mexican Grill, Inc., No. 2:12-cv-00764, 2015 WL 1284669, at *5 (E.D. Tex. Mar. 20, 2015) (Bryson, J., sitting by designation) ("[T]he Court will consider [evidence of inequitable conduct] as part of the 'totality of the circumstances' inquiry required by Octane, and the totality of the evidence . . . will be weighed using the preponderance of the evidence standard."); see also Novartis Corp. v. Webvention Holdings LLC, No. CCB-11-3620, 2015 WL 6669158, at *4, n. 5 (D. Md. Oct. 28, 2015) ("Regardless of whether [the prevailing party] could establish that [the patent owner] engaged in inequitable conduct before the PTO, this court finds that [the patent owner's] actions at least justify an inference of improper motivation or subjective bad faith, both of which can be include a district court's totality of the circumstances inquiry upon a showing of a preponderance of the evidence."). But see Robbins Co. v. Herrenknect Tunneling Sys. USA, Inc., No. 5:13cv2113, 2015 WL 3454946, at *4 (N.D. Ohio May 29, 2015) (applying clear and convincing standard to inequitable conduct allegations in motion for attorneys' fees).

The Court will use the inequitable conduct framework of materiality and intent as a guide in considering Plaintiff's conduct before the PTO, but the relevant inquiry in this motion is only whether the case "stands out from others with respect to the substantive strength of a party's litigating positions (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." *Octane Fitness*, 134 S. Ct. at 1756; *see Novartis Corp.*, 2015 WL 6669158, at *4, n. 5.

DISCUSSION

I. Defendant is the prevailing party.

The parties do not dispute that Defendant is the prevailing party, as all of the patents in suit have been invalidated, and judgment accordingly entered. Order, ECF No. 424.

II. The case is exceptional.

Defendant argues that this case is exceptional because (1) Plaintiff engaged in inequitable conduct before the PTO, (2) Plaintiff engaged in litigation misconduct, and (3) Plaintiff breached its disclosure duties before the PTO during reexamination.

a. Conduct Before the PTO during patent prosecution

Defendant argues that this case is exceptional because Plaintiff engaged in inequitable conduct before the PTO. Def.s' Br. at 18. Defendant claims that Plaintiff withheld test data produced by their employee Dr. Wang, three publications by Dr. Wang ("Wang Papers"), and Dr. Wang's affiliation with Plaintiff at the time of his declaration. Defendant also argues that a declaration by Dr. Deh-Chuan Sun that Plaintiff submitted during the prosecution of an earlier patent in the patent family constituted inequitable conduct as "affirmatively egregious misconduct." *Id.* at 21.

In response, Plaintiff contends that it did not engage in inequitable conduct. Pl.'s Opp. at 5. Plaintiff maintains that it had no duty to disclose the omitted data because it was inaccurate and inconclusive. Howmedica further argues that Defendant cannot prove that any of Howmedica's agents acted with the specific intent to deceive the PTO. *Id*.

i. Solubility and Swell Ratio Test Data During '934 Patent

During the prosecution of the '934 patent, the PTO initially rejected Howmedica's claims on the basis of a prior reference, the Streicher reference. Two claims in the '934 patent contained a limitation for "a solubility of less than 74.7%." Rutsch Decl. Ex. 1, U.S. Patent No. 6,174,934

B1 (filed Jan. 23, 1998), ECF No. 429-1. Solubility relates inversely to crosslinking; polyethylene with high crosslinking will have correspondingly low solubility. These claims were rejected by the examiner as inherently disclosed by Streicher. Rutsch Decl. Ex. 18, 7/27/99 PTO Office Action Summary at 3, ECF No. 429-18.

After the rejection, Howmedica employee Dr. Wang performed tests in an attempt to demonstrate that the '934 material met the "less than 74.7%" solubility limitation, and that the Streicher reference did not. Wang's testing compared the Streicher material, the patented '934 material, and a control sample that was nitrogen-irradiated but not otherwise treated. Rutsch Decl. Ex. 19, Ash Chopra, Interoffice Memorandum, ECF No. 429-19; Rutsch Decl. Ex. 20, Swell Ratio/ Gel Content Data, ECF No. 433-1. The test provided two relevant sets of data; a direct measure of the materials' solubility, and a measure of the materials' "swell ratio." Rutsch Decl. Ex. 20, Swell Ratio/ Gel Content Data. Like solubility, "swell ratio" is inversely related to crosslinking; highly crosslinked material will have a low swell ratio. The test provided two results for both gel content and swell ratio. The relevant results of the tests are:

Material	Gel Content	Swell Ratio	
N2 Only	99.02	4.20	
	98.89	4.31	
Duration I		3.76	
		3.81	
R.S. Material*	99.70	4.20	
	99.79	3.11	

^{*}Streicher material

Id.

The solubility test showed gel content for all materials, including Streicher, above
This equates to approximately solubility, far less than the 74.7% claimed in the

patent. The solubility data indicated that the patented material was not measurably better than Streicher, and that Streicher anticipated the claimed invention.

The swell ratio data also indicated that the Streicher material was highly crosslinked. The swell ratio measurements of the patented invention were 3.76 and 3.81, averaging 3.785. *Id.* The Streicher material had measurements of 4.20 and 3.11, averaging 3.655. *Id.* This indicated that the Streicher material had a lower swell ratio, and therefore higher crosslinking, than the claimed invention. The results were therefore consistent with the examiner's finding that Streicher inherently disclosed the '934 patent.

Howmedica and Dr. Wang did not disclose the unfavorable data relating to Streicher. Dr. Wang did not disclose any of the solubility test results (labeled "Gel Content" above), or the 3.11 Swell Ratio test result. Deni Cert. Ex. I, Decl. of Dr. Aiguo Wang ¶ 32, ECF No. 445-3. Instead, Dr. Wang provided the average of the two swell ratio test results for the patented material, 3.785, and then ran an additional swell ratio test on the Streicher material. This additional test produced a more favorable result of 3.96, which Wang averaged with the original 4.20 result and presented this new total—4.08—to the Examiner. *Id.* at ¶ 18; Rutsch Decl. Ex. 23, Aff. of Aiguo Wang, ECF No. 430-2. Contrary to the initial test results, the results presented to the examiner indicated that the patented material was, instead of less, more crosslinked than the Streicher material.

The Examiner responded that it did not find this attempt to overcome Streicher to be persuasive. Rutsch Decl. Ex. 25, 2/15/00 PTO Office Action Summary at 2, ECF No. 430-4. The Examiner stated that from the swell ratio testing it was not clear (1) "whether the difference in average swell ratio is a significant improvement (3.785 comparted to 4.08);" or (2) whether the "difference results from the [patented process] or from the difference in form of the material." *Id.* at 3. Dr. Wang then submitted a supplemental affidavit. He clarified that there was no difference

in the form of the materials. Rutsch Decl. Ex. 26, Supp. Aff. of Aiguo Wang ¶ 1, ECF No. 430-5. He then stated that the Streicher swell ratio (4.08) was "not statistically different" from the average swell ratio of the nitrogen-irradiated control sample (4.255.) *Id.* ¶ 7. Dr. Wang did not address the comparison of 3.785 to 4.08 that concerned the Examiner. The Examiner granted the patent on the basis of Dr. Wang's representations. Rutsch Decl. Ex. 28, Notice of Allowability at 2, ECF No. 430-7.

Defendant argues that Plaintiff committed inequitable conduct by failing to disclose the solubility test data and the 3.11 swell ratio test result.

1. Solubility Data

Defendant argues that nondisclosure of the solubility test data constitutes inequitable conduct. Defendant claims that the data is material because it "directly contradicted Applicant's and Dr. Wang's arguments to distinguish the Streicher . . . prior art references." Def.s' Br. at 19. Defendant argues that the indistinguishable, results for all materials reflect that all of the tested materials were so highly crosslinked that they could not dissolve. Def.'s Reply, ECF No. 449 at 5. Defendant argues that the intent to deceive is demonstrated because Plaintiff was in possession of this data that it knew was consistent with the examiner's concerns regarding Streicher, and also demonstrated by Dr. Wang's failure to respond to the examiner's concerns that the .295 improvement over Streicher was not "statistically significant." Def.'s Br. at 19–20.

Plaintiff responds that the solubility data was inconclusive, and did not need to be disclosed. Plaintiff argues that the test, which measured the materials' solubility in xylene, was an inappropriate method for measuring differences in solubility. Pl.'s Opp. at 14. Plaintiff contends that inaccuracy of the test is demonstrated by the reported gel contents of ~99% for the control sample, which is known to have a lower gel content. *Id*.

The Court cannot, on the basis of the evidence before it, determine whether the results showing gel demonstrated a high level of crosslinking of all tested materials, or merely reflected a poorly-designed test method. As the Defendants have not demonstrated that the patent would have been denied but-for the omission of the solubility data, the "materiality" prong is not satisfied. See Therasence, Inc., 649 F.3d at 1291.

2. Swell Ratio Data

Defendant argues that the omission of the 3.11 swell ratio data point also constitutes inequitable conduct. Def.s' Br. at 20. Defendant argues that the initial test confirmed that Streicher was superior to the patented material, but that Plaintiff discarded the test. *Id*.

Plaintiff answers that the 3.11 data point was discarded not to manipulate the results, but merely because it was inaccurate. Pl.'s Opp. at 8. Plaintiff submits Dr. Wang's Declaration which says that the large variation between the two data points—4.20 to 3.11—shows that one result was inaccurate. Deni Cert. Ex. I, Wang Decl. ¶ 17. Dr. Wang believed that the 3.11 value was inaccurate because it was low as compared to the results of the other swell tests. *Id.* at ¶ 18. He stated that he discarded the 3.11 test result because the third swell test showing 3.96 confirmed his belief that 3.11 was inaccurate. *Id.* at ¶ 19.

Again, with the record before it, the Court finds that the Defendant has not proved that the patents would not have issued but for the withheld data. Consequently, the Defendant has not demonstrated that the omission was material. See Therasence, Inc., 649 F.3d at 1291.

However, the Court does take note of the withheld data for purposes of the totality-of-the-circumstances inquiry. *Octane Fitness*, 134 S. Ct. at 1756; *Novartis Corp.*, 2015 WL 6669157, at *4–5 & n.5 (analyzing conduct before the PTO under totality of the circumstances inquiry and finding case exceptional "[r]egardless of whether [the prevailing party] could

establish that [the patent owner] engaged in inequitable conduct"). When faced with the Examiner's observation that Streicher anticipated the patent, Plaintiff ran tests producing four Streicher data points; two solubility tests, and two swell ratio tests. Rutsch Decl. Ex. 20, Swell Ratio/ Gel Content Data. When these results were unfavorable, Plaintiff used the single favorable data point, conducted another swell ratio test, and presented the combined results to the examiner. Deni Cert. Ex. I, Wang Decl. ¶ 17, 32. Even if some of Dr. Wang's data were unusual, the decision to only present the single favorable Streicher data point appears disingenuous. It was also likely a violation of Plaintiff's broad disclosure requirements before the PTO. See 37 C.F.R. § 1.56(b)(2); Notice of Proposed Rulemaking, 56 Fed. Reg. 37321, 37324 (Aug. 6, 1991). That Wang's declaration convinced the examiner to issue the patents indicates that the data were highly relevant to the ultimate patentability of the claims at issue, even if not but-for material. See Rutsch Decl. Ex. 28, Notice of Allowability at 2.

There is also evidence of intent to deceive the PTO. Dr. Wang failed to answer the examiner's questions about the swell ratio data in his supplemental affidavit. *See* Rutsch Decl. Ex. 26, Wang Supp. Aff. The Court rejects Plaintiff's argument that Dr. Wang did not provide a comparison between Streicher and the patented material because he was not asked. The examiner had two concerns; the shape of the samples, and whether the difference between Streicher and the patented material was statistically significant. Rutsch Decl. Ex. 25, 2/15/00 PTO Office Action Summary at 3. In allowing the claims, the examiner again focused on these two issues; the shape of the samples, and the statistical difference between the swell ratio tests. Rutsch Decl. Ex. 28, Notice of Allowability at 2. Dr. Wang's supplemental affidavit directly responded to the

⁴ At oral argument, Plaintiff's counsel correctly noted that *Therasense* explicitly refused to adopt the Rule 56 standard as the test for "materiality" for inequitable conduct claims. Sept. 8, 2017, Tr. at 29–30. However, as Counsel acknowledged, there is still a duty to disclose such information. *Id.* at 28, ¶ 20–24.

first concern but did not answer the second, and instead provided a different statistical comparison. Rutsch Decl. Ex. 26, Wang Supp. Aff.

Even if this did not constitute inequitable conduct, the Court finds that the selective disclosure of data and evasive responses provided to the Examiner are evidence of bad faith leading to a finding that this is an exceptional case. *See Novartis Corp.*, 2015 WL 6669158, at 4 n.5 ("Regardless of whether [the prevailing party] could establish that [the patent owner] engaged in inequitable conduct before the PTO, this court finds that [the patent owner's] actions at least justify an inference of improper motivation or subjective bad faith, both of which can be included in the district court's totality of the circumstances inquiry upon a showing of a preponderance of the evidence. *Octane Fitness*, 134 S. Ct. at 1756 n.6, 1757.").

ii. Dr. Wang's Employment

Dr. Wang had a critical role in obtaining Plaintiff's patents, submitting numerous declarations to the PTO during the initial patent application process. At the time of the patent application, Dr. Wang was employed by Stryker Technologies Corporation ("Stryker"). Howmedica Osteonics Corporation was, and is, a subdivision of Stryker, and Stryker owned the patent applications at issue. However, Dr. Wang's declarations to the PTO only said that he was employed by Howmedica. At the time of the patent application, Howmedica had only recently merged with Stryker.

Plaintiff argues that Dr. Wang never intentionally misrepresented his employment status to the PTO. Plaintiff points to a "Terminal Disclaimer" explaining that the patent had been assigned from the inventors to Howmedica, and then assigned from Howmedica to Stryker.

Plaintiff further argues that it was clear that Dr. Wang was employed by Stryker because of

language in his affidavit which referred to "the Applicant perfom[ing] tests," thereby suggesting that Dr. Wang and "the Applicant" were one and the same. Pl.'s Opp. at 17.

A declarant's failure to disclose his or her relationship with the patent applicant can be the basis for a finding of inequitable conduct. See Ferring B.V. v. Barr Labs., 437 F.3d 1181, 1187-88 (Fed. Cir. 2006) (finding inequitable conduct where declarants failed to disclose "ongoing and mutually beneficial relationship" with patent owner in declaration submitted in response to request for "non-inventor" affidavits); Refac Int'l, Ltd. v. Lotus Dev. Corp., 81 F.3d 1576, 1583 (Fed. Cir. 1996) (finding failure to disclose relationship with applicant constituted inequitable conduct when PTO required affidavits from disinterested persons). The court in Ferring B.V. v. Barr Laboratories, Inc., 437 F.3d 1181, 1188 (Fed. Cir. 2006) held that a "declarant's . . . relationship[] with the applicant [is] material if (1) the declarant's views on the underlying issues are material and (2) the . . . relationship to the applicant [is] a significant one."

It is unclear whether the Ferring B.V. standard survives the heightened "but for" materiality requirement articulated in Therasense. However, Therasense confirmed that the failure to disclose a relationship with the patent applicant may constitute inequitable conduct in some circumstances. See 649 F.3d at 1292 (citing Refac affirmatively, describing it as a case of "affirmative egregious misconduct"). After Therasense, courts have continued to hold that applicants may engage in inequitable conduct by failing to disclose a declarant's status as an interested party. See Front Row Tech., LLC v. NBA Media Ventures, LLC, 163 F. Supp. 3d 938, 988 (D.N.M. 2016) (finding inequitable conduct where applicant falsely described a declaration as "independent analysis" and noting that the "[f]ailure to disclose an expert declarant's affiliation raises red flags"); Caron v. QuicKutz, 2012 WL 5497869 at *11 (D. Ariz. 2012) (finding failure to disclose interested relationship to be material); Apotex, Inc. v. UCB, Inc., 970

F. Supp. 2d 1297, 1321, 1328 (S.D. Fla. 2013) (finding failure to disclose financial relationship to be both material and affirmative egregious misconduct, but noting that this omission alone was not dispositive).

While the parties acknowledge that Wang was not an inventor, Sept. 8, 2017, Tr. at 48:22, there is no dispute that Wang had an outsized role in obtaining the patents at issue. *Id.* at 14–15. Given his central role in the patent prosecution, Dr. Wang's status as an employee of the applicant was critical and subject to disclosure requirements before the PTO.

Dr. Wang failed to accurately disclose his employment relationship. No reasonable reading of Dr. Wang's declaration would create the impression that Dr. Wang was employed by Stryker on any type of permanent basis, or for any purpose beyond the scope of expert assistance with a patent application. The Terminal Disclaimer submitted by the prosecuting attorney does not make it clear that there is any type of corporate relationship between Howmedica, the initial assignee, and Stryker. *See* Deni Cert. Ex. O, 12/9/99 Terminal Disclaimer, ECF No. 444-16. It is disingenuous to suggest that Howmedica and Stryker were in the same chain of assignment ought to have put the PTO on notice that Dr. Wang was not a disinterested party. Plaintiff's prosecuting attorney confirmed this in his deposition testimony, when he admitted that there would have been no way for the PTO examiners to know of the relationship between Stryker and Howmedica. Rutsch Decl. Ex. 41, Dep. of Raymond Augustin at 303–306, ECF No. 433-6.

Whether the omission of Dr. Wang's employment status is characterized as "material" or "affirmatively egregious misconduct" is of no moment; the inquiry at hand is only whether, considering the "totality of the circumstances," this case is one that "stands out with respect to the substantive strength of a party's litigating position," or whether it was litigated in an "unreasonable" manner. Octane Fitness, 134 S. Ct. at 1756; see Novartis Corp., 2015 WL

6669158, at *4 n.5. The Court finds that the Plaintiff's failure to notify the Examiner that Dr. Wang was an employee, rather than an independent expert, is an indication that this is an exceptional case, litigated in an unreasonable manner.

iii. The Wang papers

Zimmer contends that Plaintiffs also committed inequitable conduct by withholding information from the PTO during the prosecution of the '020 patent. Def.s' Br. at 19. The '020 patent claims "[a] medical implant comprising an irradiated ultra-high molecular weight polyethylene having . . . a solubility of less than 80.9% in trichlorobenzene," and includes other claims requiring solubility in trichlorobenzene. Deni Cert. Ex. D, U.S. Patent No. 6,818,020 B2, (filed June 13, 2003), ECF No. 444-5.

The Examiner rejected the claims over England, stating that England "would be expected to inherently have a solubility in some solvent of less than 80.9% in a selected solvent, or in [trichlorobenzene]" Rutsch Decl. Ex. 32, 11/15/03 PTO Office Action Summary at 3, ECF No. 430-11. Plaintiff then provided an affidavit from Dr. Wang stating that England would have comparable solubility to material produced by "Method B," which would be 98.2% and therefore not meet the limitation of having solubility of "less than 80.9%." Rutsch Decl. Ex. 34, Wang Aff. ¶ 5, ECF No. 430-13.

This affidavit is directly contradicted by earlier testing on Method B done by the inventor of the patents, Dr. Sun, which found trichlorobenzene solubility of Method B to be 53.8%.

Rutsch Decl. Ex. 36, Letter from Frank Bichard to Dr. D.C. Sun ("Jordi letter"), ECF No. 433-5.

The testing showed solubility in trichlorobenzene below the 80.9% claimed in the '020 patent, and far below the 98.2% that Dr. Wang stated in his affidavit. The results of the tests are provided in a letter to Dr. Sun from JORDI laboratory, *id.*, and also described in a series of

papers published by the inventors of the patents and by Dr. Wang ("Wang papers"). Rutsch Decl. Ex. 37, Wang Paper 3, ECF No. 430-16; Rutsch Decl. Ex. 38, Wang Paper 2, ECF No. 430-17; Rutsch Decl. Ex. 29, Wang Paper 1, ECF No. 430-18.

Defendant claims that Plaintiff committed inequitable conduct by withholding the Wang papers because they directly contradicted Dr. Wang's declarations that were submitted to the Examiner. Def.s' Br. at 20. Defendant argues that the Wang papers are material because the PTO ultimately relied on them to reject the claims as disclosed by England. *Id.* Defendant contends that Court can infer the intent to deceive the PTO. *Id.* at 22.

Plaintiff contends that the Wang Papers are not material because the PTAB ultimately invalidated the '020 patent on other grounds and refused to endorse the Examiner's reliance on the Wang papers. Pl.'s Opp. at 16. Plaintiff further argues that the Defendant has not introduced evidence of specific intent to deceive, because Dr. Wang "simply did not recall" the substance of the papers. *Id*.

These arguments are unpersuasive. It is clear that the withheld information was material, as the PTO ultimately relied on the Wang papers in rejecting the '020 patent. Rutsch Decl. Ex. 58, PTO Reexamination, ECF No. 431-12. Further, the Court can infer materiality if the applicant engaged in "affirmative egregious misconduct." *Therasense*, 649 F.3d at 1292. Here, Dr. Wang submitted an affidavit affirmatively presenting factual assertions contrary to the data reported in his earlier work.

Under these circumstances, it is proper to infer deceptive intent from the very fact that the papers were not disclosed. It is improbable that Dr. Wang forgot that he had written a series of papers on the exact same subject on which he was now submitting an affidavit just five years earlier. Because the material omission was a paper authored by very individual who failed to

disclose it, the "single most reasonable inference" is that the patentee intended to deceive the PTO. See Therasense, 649 F.3d at 1290 (holding that inference of deceptive intent is permissible where that is the single most reasonable inference available).

These facts are similar to those in *Ohio Willow Wood Co. v. Alps South, LLC*, 813 F.3d 1350 (Fed. Cir. 2016). There, the defendant initiated reexamination before the PTO, claiming that the plaintiff's patents were obvious in light of prior art. *Id.* at 1353. The defendant supported its claim by introducing testimony that the supposedly novel features of the claimed invention already existed in the prior art. *Id.* The PTO agreed and rejected the claims for obviousness. However, the plaintiff appealed to the Board of Patent Appeals and Interferences (the "Board") and argued that the testimony was "uncorroborated" testimony of an interested witness. The Board discredited the testimony as "uncorroborated" and upheld the patent, reversing the examiner. *Id.* at 1354.

However, the plaintiff's trial attorney was aware of a series of letters which corroborated the testimony, contrary to the plaintiff's representations to the Board ("the Scalise letters"). *Id.* at 1355–56. The attorney did not provide the Scalise letters to the reexamination attorneys or the Board. *Id.* The Federal Circuit found that the failure to disclose the letters constituted inequitable conduct. The court reasoned that evidence corroborating the disputed testimony was material because the Board had found the issue of "corroboration" to be determinative. *Id.* at 1358. The court inferred intent to deceive because the attorney "was aware of the 1999 Scalise letters and knew that their contents were consistent with [the disputed] testimony." *Id.*

Like the letters in *Ohio Willow Wood*, the contents of the Wang Papers directly contradicted the position taken by Howmedica regarding the solubility of Method B. Because the Examiner ultimately relied on Wang's declaration, the Wang Papers contradicting his statements

are material. *Id.* at 1358. Further, because the Wang Papers were authored by the very person whose affidavit is at issue, the evidence of intent to deceive is stronger here than in *Ohio Willow Wood*.

Plaintiff argues that there was no duty to disclose the Wang papers because they were not prior art, and that "it was not [the prosecuting attorney's] practice to request non-prior art materials." Pl.'s Opp. at 16. However, the same argument was rejected in *Ohio Willow Wood*, and is similarly rejected here. *See* 813 F.3d at 1359 (noting that the question of corroboration was different from prior art, and that the attorney "understood that [they] were separate questions"). Here the relevance of the Wang Papers is not that they were prior art, but that they directly contradict Dr. Wang's affidavit offered to overcome initial rejection by the PTO.

Presenting the declaration from Wang which explicitly contradicted his publications, and the failure to present the Wang papers themselves, are evidence of subjective bad faith leading to the conclusion that this is an exceptional case.

iv. Dr. Sun's affidavit

Defendant also claims that Plaintiff committed inequitable conduct by submitting a declaration by inventor Dr. Sun during prosecution of an earlier patent in the patent family containing an affirmative misrepresentation about the state of the prior art. Defendant argues that the declaration constitutes affirmative egregious misconduct because it contains a statement directly contradicting data Sun had sent in a letter only two months earlier.

Plaintiff replies that there is no evidence that the affidavit was false, and that the affidavit is consistent with the earlier letter. Plaintiff also says that there is no evidence of specific intent to deceive the PTO.

Dr. Sun declared to the PTO that the patented process resulted in a free radical concentration of less than 1 x 10¹⁷/g, and that "[f]ree radical concentrations are several orders of magnitude higher without the process taught in the application, i.e., irradiation in air or irradiation and heat treatment in air." Rutsch Decl. Ex. 59, Decl. of Deh-Chuan Sun ¶ 5, ECF No. 431-13. However, Dr. Sun had written a letter two months earlier that "[w]e realize that one can get lower free radical concentrations than this level [1 x 10¹⁷/g], even without the stabilization process described in the patent. But, the intention is to cover a broad range caused by various dose, dose rates, and material responses." Rutsch Decl. Ex. 60, Letter from D.C. Sun to Patricia Chawke at HOW024942, ECF No. 433-14.

These statements are in tension, but are not facially contradictory. Plaintiff argues that in his declaration, Sun was trying to convey that heating and/ or irradiation in air will result in higher free radical concentrations than heating and/ or irradiation in an inert atmosphere. In the letter, plaintiff continues, Sun was merely saying that time and temperature combinations above the patented process could minimize free radical concentrations to an even lower level than the patented process, but that the patented process was preferable for other reasons.

Plaintiff's claim is plausible. The declaration references "irradiation in air or irradiation and heat treatment in air," which indicates that Sun was comparing treatment in air to treatment in an inert environment. In contrast, the letter states that the intention of the patent is to "cover a broad range caused by various dose, dose rates, and material responses," which indicates that the letter was discussing the optimal options for UHMWPE treatment, not comparing the patented process to the prior art.

Based on the evidence before it, the Court does not find that the Sun declaration is evidence of bad faith or improper motivation.

b. Litigation misconduct

Defendant also argues that this case is exceptional because Plaintiff engaged in litigation misconduct. Specifically, Defendant contends that Plaintiff failed to withdraw its infringement claims once it knew they were baseless in light of the Lue reference and took contrary positions regarding its construction of "Arrhenius equation." Def.s' Br. at 12, 25. Defendant also contends that Plaintiff took contradicting positions on the contents of the Wang papers. *Id.* at 13–14.

In response, Plaintiff contends that Lue did not invalidate the '020 patent "on its face," and that it continued to litigate this case in "good faith." Pl.'s Opp. at 24. Plaintiff argues that it did not change its construction of the Arrhenius limitation, and that, even if it did, such a change would not render this case exceptional. *Id.* at 23–24. Plaintiff further contends that it changed in position about the Wang papers in response to new information—specifically, a fourth Wang Paper. *Id.* at 26.

A finding of exceptionality under 35 U.S.C. § 285 may be predicated on misconduct during litigation. *Monolithic Power Sys. v. O2 Micro Int'l*, 726 F.3d 1359, 1366 (Fed. Cir. 2013). In determining whether litigation misconduct renders a case "exceptional," the Court may consider the baselessness of a party's claim, the party's subjective bad faith, the objective unreasonableness of its position, or the need for compensation and deterrence. *Octane Fitness*, 134 S. Ct. at 1756–57 & n.6; *Kilopass Tech. v. Sidense Corp.* 738 F. 3d 1302, 1316 (Fed. Cir. 2013). The ultimate finding of exceptionality, however, is a "simple discretionary inquiry" and does not turn on any "precise rule or formula." *Octane Fitness*, 134 S. Ct. at 1756.

i. The Arrhenius limitation and the Lue reference

Three of the patents in suit contain a limitation requiring the UHMWPE be heated for a temperature time "at least equivalent to heating said irradiated material at 50°C for 144 hours as

defined by the Arrhenius' equation (14)." See, e.g., '934 Patent, claim 1. To avoid the difficulty of applying the complex Arrhenius equation, Howmedica relied on a "General Rule" for its construction of this limitation during patent prosecution and claim construction in this litigation. Rutsch Decl. Ex. 24, 12/9/99 Response to Second Office Action at 8, ECF No. 430-3; Decl. of Stephen Li ¶ 21 ECF No. 46-9. Plaintiff proposed that instead of applying the Arrhenius equation precisely, one could apply the "General Rule" that similar cross-linking will occur if heating time is cut in half for every 10°C increase in heat. Li Decl. ¶ 21, ECF No. 46-9.

One year after Plaintiff filed its initial infringement claims, Defendant discovered a thesis written by Ching-Tai Lue ("the Lue reference"). Rutsch Decl. Ex. 16, Ching-Tai Lue, Effects of Gamma Irradiation and Post Heat-Treatments of the Structure and Mechanical Properties of Ultra High Molecular Weight Polyethylene, ECF No. 429-16. As a result of this discovery, Defendant provided Plaintiff with an invalidity claim chart in May 2006 which showed that the Lue reference anticipated their patents under the "General Rule" construction. Rutsch Decl. Ex. 44, Lue Claim Chart, ECF No. 430-23. To overcome invalidity in light of the Lue reference, Plaintiff changed position and argued that the General Rule was to be used as an "aid" to the Court and the jury in understanding the Arrhenius equation, but was not intended to be used as a literal substitute. Pl's Mot. to File Amended Cl. Const. Br. at 1, ECF No. 74-1; see also Pl.'s Br. at 21, ECF No. 445. However, construing the Arrhenius limitation as a literal application of the Arrhenius equation rendered the patents indefinite because the patents did not include enough information for one skilled in the art to determine what other time/ temperature combinations would meet this limitation. Opinion, ECF No. 176.

Defendant argues that Plaintiff ought to have recognized that its claims were baseless and dismissed their lawsuit against Defendant. Instead, Defendant continued to litigate its claims for

ten more years. In 2016, the Federal Circuit found that the Lue reference did anticipate

Howmedica's claims, rendering their patents invalid. *Howmedica Osteonics Corp. v. Zimmer,*Inc., 640 F. App'x 951, 959 (Fed. Cir. 2016).

Plaintiff argues that it continued to pursue its claims in good faith after the discovery of the Lue reference, because Lue on its face did not invalidate Howmedica's patents. While the PTAB and the Federal Circuit did ultimately invalidate the '020 patent in light of the Lue reference, this was based on a recreation of Lue's thesis, which had been conducted in 1979 with different materials. *Howmedica*, 690 F. App'x at 957. At the time that the Lue reference was disclosed, both Plaintiff and Defendant's expert were unsure if the Lue thesis had been accurately recreated. Plaintiff argues that given this uncertainty, its decision to challenge the significance of the Lue reference and continue pursuing its claims it was reasonable and not in bad faith.

This is a mischaracterization of the actions Plaintiff took after becoming aware of the Lue thesis. Instead of continuing to pursue its claims while attempting to test and accurately recreate the Lue reference, Plaintiff adopted a new position that contradicted its earlier claim construction and testing data in order to avoid invalidation by the Lue reference. *See* Opinion, ECF No. 176 at 15, 16 (noting that Plaintiff's testimony in support of its new claim construction directly contradicted its earlier position).

Plaintiff argues that it never changed its construction of the Arrhenius limitation, and that it had always intended the General Rule to serve as an estimate to the Court for approximation rather than a literal substitute. Pl.'s Br. at 22. But Plaintiff advocated the use of the General Rule and not the Arrhenius equation during patent prosecution, Rutsch Decl. Ex. 24, 12/9/99

Response to Second Office Action, and submitted affidavits unequivocally using the General Rule as a substitute for Arrhenius' equation. *See* Li Decl. ¶ 21 ECF No. 46-9.

Plaintiff is correct that it was not required to accept the validity of the Lue reference on its face, and it certainly would have been entitled to engage in expert testing of the thesis before agreeing to dismiss its claims against Defendant. However, by adopting a completely new and contradictory position, Plaintiff demonstrated that it knew what Defendant, the Federal Circuit, and the PTAB ultimately agreed upon: the Lue reference invalidated their patents. To continue to pursue claims that it knew were baseless over a period of ten years amounts to litigation misconduct. The unreasonable nature of Plaintiff's position is highlighted by its willingness to advance an objectively unreasonable claim construction that directly contradicted the language of the claims themselves. *See* Opinion, ECF No. 176 at 17 ("In short, neither Howmedica nor its experts provide any basis for assuming that 4 hours at 130°C is equivalent to 144 hours at 50°C [as required to support Howmedica's proposed claim construction].").

An award of attorney fees and costs is appropriate in this instance to compensate

Defendant forced to defend itself against Plaintiff's baseless claims.

ii. Plaintiff's position on the Wang papers

Plaintiff argues that Defendant committed litigation misconduct by changing position on the Wang papers. Plaintiff specifically argues that Defendant initially took the position that the Wang Papers report solubility in trichlorobenene, but later changed course and argued that the papers report solubility in xylene. Def.s' Br. at 13.

Defendant maintains that its experts consistently took the position that solubility in xylene did not correspond to solubility in trichlorobenzene. Pl.'s Br. at 26. Defendant further points out that the PTAB ultimately accepted its argument that the two solvents have different

solubility for UHMWPE. See Deni Cert. Ex. M, Smith & Nephew, Inc. v. Howmedica Osteonics Corp. (Howmedica PTAB Appeal), No. 2013-007710 at 17 (P.T.A.B. Apr. 30, 2014), ECF No. 444-14.

The Wang papers provided unsatisfactory information about the solvent used to conduct solubility testing. One of the papers discloses the solubility of a material in "[b]oth trichlorobenzene and xylene," but provides only one set of results. Rutsch Decl. Ex. 39, Wang Paper 1 at HOW066652. This either indicates that the author used them interchangeably believing that solubility in trichlorobenzene and xylene are equal, or that the study used only one solvent. The other papers do not indicate which solvent was used.

Plaintiff took contradicting positions as to whether the trichlorobenzene or xylene was used in the Wang papers throughout litigation and reexamination. During this litigation,

Defendant presented evidence using data from the Wang papers to demonstrate that the Lue reference met the solubility limitation of "solubility less than 80.9% in trichlorobenzene." Rutsch Decl. Ex. 48, Expert Report of Susan P. James at 25–27, ECF No. 433-8. Defendant's argument that Lue met this limitation relied on its view that solubility in trichlorobenzene is equivalent to solubility in xylene, or at least sufficiently correlated to use solubility in one as a measure for solubility in the other. To rebut this evidence, Plaintiff's experts Dr. Li and Dr. Pruitt claimed that the Wang paper "likely relates solely to trichlorobenzene." Rutsch Decl. Ex. 49, Rebuttal Expert Witness Report of Stephen Li at 54, ECF No. 433-9; Rutsch Decl. Ex. 50, Expert Witness Rebuttal Report of Lisa A. Pruitt at 26, ECF No. 433-10. If the Wang papers reflected testing solely in trichlorobenzene, then they provided no information about the relationship between xylene and trichlorobenzene solubility, and would not be evidence that Lue invalidated the patent under that theory.

This position presented a problem because the Wang papers reported that prior art material had solubility of 40-60%. If the testing reported in the Wang papers used trichlorobenzene, then the papers themselves disclosed a method of creating material with solubility "less than 80.9% in trichlorobenzene" and would invalidate some claims of the '020 patent. As a result, Plaintiff advanced the position during reexamination that the Wang papers reflected solubility in xylene, not trichlorobenzene. *See* Deni Cert. Ex. M, *Howmedica PTAB Appeal*, at 13–17.

During reexamination, the Examiner agreed with Defendants and invalidated claims 1 and 5 of the '020 patent based on the Wang papers. On appeal, the PTAB rejected this rationale and found that the soluble used in the papers was likely xylene, and that the Wang papers did not prove that xylene and trichlorobenzene have equivalent solubility. *Id.* at 17. The Federal Circuit ultimately invalidated the '020 patent in light of Lue relying on other rationale. *Howmedica Osteonics Corp.*, 6401 F. Appx. at 962.

While Plaintiff unarguably reversed its position on the Wang papers, this did not constitute litigation misconduct. Using the information presented, Plaintiff advanced different positions about the solvent used in the Wang papers at different points of litigation and reexamination. However, Plaintiff has maintained the same position throughout—that solubility in xylene is not conclusive evidence of corresponding solubility in trichlorobenzene. In Dr. Li's supplemental report in which he changes position on the solvent used in the Wang papers, he maintains the ultimate position that "solubility in xylene does not necessarily differ from the measured solubility in trichlorobenzene by about 15-20%, nor is it possible to predict the difference in solubility." Rutsch Decl. Ex. 53, Supp. Expert Witness Rep. of Stephen Li at 18, ECF No. 433-12. As the PTAB noted, the Wang papers are unclear about whether they reflected

at 13 n. 18 (noting that reports in one of the Wang papers "further confuses rather than clarifies the range reported in [the earlier publication]"). Given this lack of clarity, and the consistency of Plaintiff's primary position on the relationship between the solvents, the Court finds that the change in position was not litigation misconduct.

c. Conduct during reexamination

Defendant next argues that Defendant "had Dr. Streicher and Dr. Li attempt to directly contradict the Streicher prior art reference" during reexamination of the '020 patent in 2009. Def.'s Br., at 14. Specifically, Defendant argues that Plaintiff improperly obtained a declaration from Dr. Streicher, author of the Streicher reference, stating that the Streicher material did not exhibit the favorable characteristics of the patented invention. *Id.* At the time of the declaration, Dr. Streicher was employed by Plaintiff.

Plaintiff asserts that the Streicher material did not exhibit the favorable wear characteristics of the claimed invention. Plaintiff maintains this disagreement does not constitute litigation misconduct, but is merely an ordinary dispute over the meaning of evidence. Pl.'s Opp. at 28.

The Court finds it implausible that Plaintiff believed that Streicher's declaration was consistent with the Streicher article. The Streicher article repeatedly references characteristics central to these patents. It describes the Streicher material as having "enhanced crosslinking" and "negligible" oxidation, and states that its method "reduces postoxidation effects significantly." Rutsch Decl. Ex. 10, Robert M. Streicher, *Investigation on Sterilization and Modification of High Molecular Weight Polyethylenes by Ionizing Irradiation* at 39, 43, ECF No. 429-10. In contrast, Dr. Streicher states in his declaration that the Streicher material exhibited "substantial"

oxidation," and that "a person of ordinary skill in the art . . . would not have used or pursued annealing UHMWPE after irradiation because it failed to eliminate or appreciably reduce oxidation, wear or degradation." Rutsch Decl. Ex. 57, Decl. of Robert Streicher ¶ 22–23, ECF No. 431-11. Dr. Streicher takes this position despite finding that the material exhibited a 40% reduction in oxidation. *Id.* ("While on its face a 40% reduction in oxidation appears to be a vast improvement in oxidation resistance, I observed substantial oxidation of the [Streicher] UHMWPE material").

Dr. Streicher's declaration facially contradicts the content of the Streicher reference. The thrust of the Streicher reference was that its method would increase crosslinking and decrease oxidation. The examiner acknowledged the blatant contradiction between Dr. Streicher's declaration and the content of the Streicher reference, noting that the Streicher article "in fact repeatedly acknowledges a significant reduction in oxidation achieved by the irradiated and annealed samples," and that the Streicher declaration "goes so far as to state that the 40% reduction in oxidation reported in the Streicher article is not actually significant. It is unclear what degree of reduction Streicher in his declaration, would consider significant." Rutsch Decl. Ex. 58, PTO Reexamination at 34–35. This objectively unreasonable position supports a finding that this is an exceptional case.

d. Totality of the circumstances

Based on the totality of the circumstances, the Court finds that this case is exceptional. Regardless whether the failure to disclose the solubility testing or Streicher swell test data constitutes inequitable conduct, the Court finds that these omissions demonstrated bad faith, and were more likely than not violations of Plaintiff's duty of candor before the Examiner. Further, Plaintiff submitted a series of affidavits by Dr. Wang containing representations directly

contradicted by the Wang papers and earlier testing by the inventor. Wang also failed to disclose the Wang papers, as well as his employment relationship with the patent applicant and the inventor. When faced with the prior art that ultimately invalidated the patents in suit, Plaintiff proposed a new, facially indefinite claim construction that directly contradicted its earlier position. During reexamination, Plaintiff obtained a declaration from the author of the Streicher reference (one of the biggest hurdles to patent validity other than Lue) attempting to contradict and discredit his own earlier work. The PTO repeatedly and consistently rejected Plaintiff's attempts to utilize sworn statements by its experts to manipulate and conceal the content of their own earlier research. The Court rejects Plaintiff's contention that Wang "forgot" the content of the Wang Papers, and similarly rejects, as discussed, the argument that Dr. Streicher's declaration is consistent with the Streicher reference.

III. Defendants' fee request is reasonable.

The Court has decided that this case is exceptional, and it decides an award of reasonable attorneys' fees is appropriate. *See Special Devices, Inc. v. OEA, Inc.*, 269 F.3d 1340, 1344 (Fed. Cir. 2001) (describing section 285 as a "two-step analysis of first determining whether the case is exceptional and then determining the amount of the award"); *Machinery Corp.*, 774 F.2d at 470–71 (noting that "the fees must be reasonable").

Defendant moves for \$13,496,086.96 in attorneys' fees, \$513,258.38 in expenses, \$1,016,599.29 in expert fees, and \$5,821,225.69 in prejudgment interest. Def.s' Br. at 30.

Plaintiff raises several objections to Defendant's proposed award. Plaintiff first objects to the hourly rates charged, claiming that the proposed rates are not consistent with the District of New Jersey. Sept. 8, 2017, Tr. at 40. Plaintiff also objects to certain costs, including airport parking, fax charges, and library loan fees. *Id.* at 44. Plaintiff further objects to the award of

expert fees, claiming that even if this case is exceptional, it does not constitute fraud on the Court such that expert fees are justified. *Id.* at 39. Finally, Plaintiff objects to the rate of interest to be used in calculate prejudgment interest. *Id.* at 38.

a. Calculation of Fees

The Court begins its determination of a reasonable attorney fee award by calculating the lodestar amount. Pa. Env't Def. Found. v. Canon-McMillan Sch. Dist., 152 F.3d 228, 231 (3d Cir. 1998). The lodestar is the "number of hours reasonably expended on the litigation multiplied by a reasonable hourly rate." Hensley v. Eckerhart, 461 U.S. 424, 433 (1983). "To show the reasonableness of a requested rate, counsel must produce satisfactory evidence — in addition to their own affidavits — that the requested rates are in line with those prevailing in the community for similar services by lawyers of reasonably comparable skill, experience, and reputation." Spectrum Produce Distributing, Inc. v. Fresh Marketing, Inc., Civ No. 11-06368 (JBS/KNW), 2012 WL 2369367, at *4 (D.N.J. June 20, 2012) (alterations omitted) (quoting Blum v. Stenson, 465 U.S. 886, 896 n.11 (1984)).

Local Civil Rule 54.2 governs fee awards, and requires the party seeking fees to provide certain materials to the Court, including affidavits setting forth the nature of services rendered, a record of the dates and times of services rendered, a description of the services rendered on each date, a description of the professional experience of each person rendering services, the normal billing rate for each person rendering services, any fee agreements, and the amounts actually billed to the client and paid by the client. *See* L.Civ.R. 54.2(a)–(b). In the 35 U.S.C. § 285 context, Courts generally consider hourly time records and expense statements along with documentation in support of the movant's billing rates as compared with those prevailing in the community for similar work, taking into account the attorneys' skill and experience. See *Source*

*9 (D.N.J. Mar. 31, 2016). The party seeking an award of fees has the burden to provide evidence supporting the hours worked and rates claimed. Hensley, 461 U.S. at 434. To the extent the affidavits and supporting documentation submitted by the party seeking fees "leaves any doubt as to the amount of fees to be awarded, these doubts shall be resolved against an award of fees." Spectrum Produce, 2012 WL 2369367, at *3 (quoting Veneziano v. Long Island Pipe Fabrication & Supply Corp., 487 F. Supp. 2d 683, 695 (D.N.J. 2002)).

i. Hourly Rate

Defendant submitted billing records that show that sixteen different attorneys, five paralegals, and two assistants performed work on this matter. Rutsch Decl. Ex. 68, Decl. of Bryan Hales, Ex. C, ECF No. 431-22. Attorneys from three different law firms performed work on this matter: Tompkins, McGuire, Wachenfeld & Barry LLP ("Tompkins McGuire"), Kirkland & Ellis LLP ("Kirkland"), and Latham & Watkins LLP ("Latham"). *Id.* In support of its request, Defendant has submitted the following documentary exhibits: (1) biographical information about the individual attorneys; (2) invoices from each law firm; (3) a matrix of the billing rates and hours billed for each attorney; (4) daily time entries showing the date, attorney name, description of work performed, and the amount of time spent dating back to 2005; and (5) a declaration of Chuck Chandler, the founder of Valeo Partners, comparing the requested billing rates to the billing rates charged by similar law firms. Hales Decl. Ex.'s A–E.

The rates Defendant seeks for the work performed on this case range from \$220/ hour to \$1295/ hour for attorneys and \$125/hour to \$240/hour for paralegals. *Id.* Ex. C. This range of hourly rate are reflected in the matrix of billing rates and hours billed. The rates are broken into

two charts, one reflecting the work performed by Kirkland, and the other reflecting work done by Tompkins McGuire.

The rates charged by Kirkland range from \$220/hour (Associates in 2005) to \$1295/hour (Partner in 2016). Defendants submitted a declaration of Chuck Chandler (the "Chandler Declaration"), founder of Valeo Partners, a legal intelligence firm that collects the billing rates of law firms. *Id.* Ex. E. The Chandler Declaration analyzes the proposed billing rates against Valeo Partners' compiled billing data, taking into consideration practice area, experience, and firm size and expertise, using a national average. *Id.* ¶ 7. Chandler uses the AMLAW 50 Listings as the benchmark for the Kirland and Latham attorneys. The analysis compared the rate charged for each individual timekeeper each year to the national average, and provided the percentage that the individual timekeeper was charging over or under the national average. Because Kirkland and Latham afforded Defendant a series of discounts beginning in 2009, Chandler provided the over/under percentage statistics before and after the discounts were applied. Chandler Decl. Ex.'s D, E, Kirkland & Ellis and Latham and Watkins Data.

Mr. Chandler's data revealed that the Kirkland and Latham attorneys billed, on average, 4% below peer firms for the time period of 2005-2016 pre-discount. *See* Chandler Decl. ¶ 8. Taking into account these discounts, Defendant's attorneys billed on average 11% below peer firms. *Id.* ¶ 9.

Plaintiff contends that these billing rates are too high. Pl.'s Opp. at 30. In its Reply Brief, Plaintiff asserted that it "reserve[d] the right to challenge the amount of [Defendant's] fees" until after the Court ruled on the issue of exceptionality. Plaintiff claimed that it did not argue the issue of fee calculation because the fee award "must bear some relation to the extent of the misconduct," and Defendant did not make an effort to apportion its fee request accordingly. *Id.*

(quoting Read Corp. v. Portec, Inc., 970 F.2d 816, 831 (Fed Cir. 1992) superseded on other grounds, as recognized by Hoescht Celanese Corp. v. BP Chems. Ltd., 78 F.3d 1575 (Fed Cir. 1996)). However, this argument makes little sense; apportionment is appropriate when the prevailing party would have incurred some of the expended attorney fees even without the misconduct that renders the case exceptional. See Beckman Instruments v. LKB Produkter AB, 892 F.2d 1547, 1553 (Fed. Cir. 1989) (finding apportionment appropriate because the prevailing party "would have incurred substantial legal expenses regardless of the [losing party's] misconduct"). As the Defendant's exceptionality theory here is that Plaintiff committed inequitable conduct that led the PTO to issue the patents, Defendant would not have incurred any attorneys' fees related to this litigation without Plaintiff's misconduct. See id. (apportioning fees because "[i]n this respect, the case differs from cases in which . . . inequitable conduct on the part of patentee led to the bringing of the lawsuit" (emphasis in original)). Because it was clear that Defendant sought fees covering the entirety of this litigation, the appropriate time to argue that apportionment is necessary was in answer to this motion.

At oral argument, Plaintiff also argued that the billing rates are excessive because they are based on a national average rather than the local rates of the District of New Jersey. Sept. 8, 2017, Tr. at 40. When asked, Counsel suggested to look to the American Intellectual Property Law Association (AIPLA) rates for guidance, but was unable to provide proposed alternative rates. Counsel then submitted a letter attaching the AIPLA rates, and arguing that the applicable region for Newark is "Other East." Letter from William Deni, ECF No. 456. Other than Mr. Deni's assertion, Plaintiff did not provide any documentary evidence that "Other East" is the appropriate location for Newark fee calculation as opposed to New York City Consolidated Metropolitan Statistical Area (New York CMSA).

In contrast, Defendant has submitted the Chandler Declaration in support of its contention that the applicable standard is national rather than local. Chandler declares that law firms such as Kirkland and Latham generally use a "national rate in all major US Cities, varying those rates by experience and practice specialization, not by location." Hales Decl. Ex. E, Chandler Decl. ¶ 7. Chandler further declares that Newark is considered part of the New York Combined Statistical Area, which is the highest overall rate in the Valeo Database, and that the national average is used in the interest of conservativism. *Id.* Newark is but fifteen miles from meeting with New York Manhattan and Wall Street metropolitan.

The Court finds Chandler's declaration persuasive, and will therefore use the AMLAW 50 Average as the basis for comparison. Given the highly specialized area of law, the expertise required, and the exorbitant \$2 billion damages sought by Plaintiff in this case, this AMLAW 50 national rate is appropriate. Even if the Court were inclined to apply the AIPLA rates rather than the AMLAW 50, Plaintiffs have not submitted any evidence to support their argument that the "Other East" rates should apply, while Defendant has submitted a declaration that the applicable geographic region would be "New York CMSA."

Applying the AMLAW 50 Average provided in the Chandler Declaration, the fees sought are reasonable in part and unreasonable in part. While Chandler's analysis shows a billing rate on average 11% below the AMLAW 50 Average, some individual rates charged exceed this Average. Having determined that the AMLAW 50 is appropriate, the Court finds unreasonable any billing rate more than 5% above that AMLAW 50 Average for a given period.

Based on this, the following fee rates shall be reduced from the rate charged to the AMLAW 50 Average:

Year	Timekeeper	Rate Charged to	AMLAW 50
		Zimmer	Average
2005	Ann Marie T. Wahls	\$370*	\$318
2007	Imron T. Aly	\$480	\$457
2007	Shauiab A. Atique	\$403	\$345
2008 (Jul-Dec)	Bryce A. Budin and Bryan C. Rutsch	\$420**	\$359
2009	Bryce A. Budin and Bryan C. Rutsch	\$405	\$374
2010	Dennis J. Abelnour	\$419	\$390

^{*} For years in which all rates charged exceeded the AMLAW 50 Average, the Court refers to the Blended Rate provided in Exhibit E to the Chandler Declaration for the full year.

Further, since 2012, only 27.1 hours were billed to an attorney below the level of Counsel. During this time, there was a significant amount of work done by attorneys billing at a high rate that could have been achieved by more cost-effective actors. Since 2012, the Court has identified 50.55 hours of work done by Counsel-level attorneys that consisted of general legal research or initial drafting that could have been done by an Associate with a lower billing rate. These hours, billed by Mr. Rutsch, are: 8.25 hours in 2012 (2/6/12); 12 hours in 2013 (10/11/13 and 10/16/13); 11.3 hours in 2014 (5/15/14 and 6/10/14); and 19 hours in 2015 (1/05/15, 4/23/15, and 8/23/15). The Court will apply a billing rate of \$405 for these hours, as Mr. Rutsch's highest billing rate as an Associate.

The Court also finds any billing rate above \$900/hour to be unreasonable. Therefore, a billing rate of \$900 will be applied to: Mr. Pals, 2014 (\$956.25 post-discount), 2015 (\$1,015.75 post-discount), and 2016 (\$1,100.75 post-discount); Mr. Hales, Jan-June 2016 (\$922.25 post-discount) and July 2016 (\$956.25 post-discount); and Mr. Callahan, 2015 (\$930.75 post-discount) and 2016 (\$977.50 post-discount). Hales Decl. Ex. C.

^{**} While Chandler provides a blended average billing rate for each year, the Court will modify only the portion of the year in which the rate charged exceeded the AMLAW 50 Average.

Mr. Chandler separately compared the billing rates of local counsel Tompkins McGuire to peer firms and found that the two Tompkins McGuire attorneys respectively billed 6% and 32% below peer firms. Chandler Decl. ¶ 11. The Court finds the fees of local counsel to be reasonable and awards fees for local counsel at the rates requested.

The Chandler Declaration also looked at the billing rates of support staff and found that the work performed on this matter by paralegals and assistants was billed at a significantly lower rate than the industry average. See id. ¶ 12. Support staff on this matter were billed out at an average discounted rate of \$139/hour, as compared to an industry average of \$206/average. This is comparable to prevailing rates for paralegal work in the Third Circuit. See U.A. Local 322 Pension Fund v. J.R. McGee Plumbing Ltd. Liab. Co., No. CV 16-3738 (RMB/KMW), 2017 WL 498692, at *4–5 (D.N.J. Feb. 7, 2017) (awarding attorney fees for paralegal work at the hourly rate of \$125). The Court finds Defendant's requested hourly rate for paralegals and other support staff reasonable, and awards fees for support staff at the rates requested.

ii. Time Reasonably Expended

The Court next determines how much time was reasonably expended on the matter. Public Interest Research Group of N.J., Inc. v. Winall, 51 F.3d 1179, 1188 (3d Cir. 1995). To establish the reasonableness of the time spent litigating this matter, Defendant submitted over 400 pages of unredacted daily time entries, containing a narrative description of each task performed. Hales Decl. Ex. D. Defendant requests fees for a total of 29,854.95 attorney hours and 6433.25 paralegal and support staff hours. See Hales Decl. Ex. C. Plaintiff has not challenged Defendant's calculation or recording of hours reasonably expended.

Though a majority of the requested hours were reasonable, the Court finds Defendants' billing unreasonable in part. The Court finds Defendants' billing unreasonable to the extent it

includes hours billed due to inexperience, hours billed for tasks that should have been performed by more cost-effective actors, and hours for tasks that took an excessive amount of time to complete. See Spectrum Produce, 2012 WL 2369367, at *5-10.

The bulk of the hours billed in the early years of this litigation were billed by inexperienced attorneys including those who were not yet admitted to the bar. *See* Hales Decl. ¶ 9 (B. Rutsch and B. Budin not initially admitted to practice); *cf.* Hales Decl. Ex. C (B. Rutsch 1399 hours for 2006, B. Budin 1520.25 hours for 2006). While the use of junior attorneys can keep costs low and is commendable, the Court finds that the large number of hours billed for work by inexperienced and inefficient actors is unreasonable.

In his Declaration, Mr. Hales explains that once Budin and Rutsch were added to this matter, "Attorney Min Wang provided stopgap support until Mr. Rutsch and Mrs. Budin were admitted to practice after graduation from law school." Hales Decl. at 3. The Court finds that the hours billed to Min Wang are duplicative of those billed to Budin and Rutsch during that time, and those 229.75 hours will be reduced from Budin and Rutsch's combined 867 hours from that year, with a combined total for Budin and Rutsch in 2005 of 637.25 hours at the rate of \$220/hour.

Similarly, in 2007, Thomas W. Osier was added to this matter as an Associate with no legal experience, and billed 478.5 hours between October and December. Of those, 39.25 hours were spent reviewing documents to become acquainted with the matter (October 3, 4, 5, 8, and 9). Those hours will be reduced from Osier's total, with a total of 469.25 hours at a rate of \$255/hour.

Reduction Calculations:

Year	Name	Hours	Rate	Modified	Amount
				Charge	Reduced
2005	Ann Marie Wahls	409	\$318*	\$130,062	\$21,268
2005	Rutsch and Budin	637.25*	\$220	\$140,195	\$50,545
2007	Imron Aly	691.5	\$457*	\$316,015.5	\$15,904.5
2007	Thomas Osier	469.25*	\$255	\$119,658.75	\$2,358.75
2008 (Jul-	Rutsch and Budin	482.25	\$359*	\$173,127.75	\$29,417.25
Dec)					
2009	Rutsch and Budin	1,628.5	\$374*	\$609,059	\$63,484.25**
2010	Dennis Abelnour	13.25	\$390*	\$5,167.5	\$384.25
2014	Mark Pals	20.5	\$900*	\$18,450	\$1,153.13***
2015	Mark Pals	46	\$900*	\$41,400	\$5,324.50***
2015	David Callahan	184.1	\$900*	\$165,690	\$5,661.08***
2016	Mark Pals	6.3	\$900*	\$5,670	\$1,264.73***
2016	David Callahan	57.8	\$900*	\$52,020	\$1,777.35***
2016 (Jan-	Bryan Hales	36.4	\$900*	\$32,760	\$809.90***
June)					
2016 (July)	Bryan Hales	3.1	\$900*	\$2,790	\$174.38***
Total					\$199,527.10
Reduction					_

^{*} This reflects an amount modified by the Court.

*** This calculation reflects the difference between the Modified Charge and the original amount charged, calculated as the Hourly Rate reflected in Hales Exhibit C, reduced by 15%.

As the Court finds the fee award otherwise reasonable, the Court will reduce this total reduction from the \$13,496,086.96 charged to Defendant, and awards a lodestar total of \$13,296,559.90 in fees for attorneys and legal and paralegal assistants.

b. Award of Costs

Defendant petitions the Court for \$513, 258.38 in costs expended for travel, legal research, document reproduction and storage, communications, translation services and deposition holding. Hales Decl. Ex. F. The reasonableness of costs is assessed on the same basis

^{**} This calculation reflects the difference between the Modified Charge and \$672,543.25, the sum of three separate billing rates for 2009: Jan-April (\$252,947.50); May-Jun (\$219,622.50); and July-Dec. (\$199,973.25). Hales Decl. Ex. C. These totals reflect the 10% discount applied beginning in May.

as attorney fees. Loughner v. University of Pittsburgh. 260 F. 3d 173, 181 (3d Cir. 2001). A petition for costs must be specific enough to allow the Court to determine if the costs claimed are unreasonable for the work performed. Id. Defendant has submitted a detailed breakdown of all of their costs. Hales Decl. Ex. F.

Plaintiff objects to certain of these expenses. Specifically, Plaintiff objects to an award of airport parking, fax expenses, and library loan fees. Sept. 8, 2017, Tr. at 44. In the Court's judgment, these costs were all rendered necessary by the nature of this litigation and the Court finds them to be reasonable. Defendant is awarded their requested costs of \$513, 258.38.

c. Expert Fees

Defendant seeks an award of \$1,016,599.29 in expert fees. The Court has the authority to award expert fees where an award of attorneys fees under § 285 is an inadequate sanction on the non-moving party. *MarcTec, LLC v. Johnson & Johnson*, 664 F.3d 907, 921 (Fed. Cir. 2012). Not every case qualifying as exceptional under § 285 will qualify for the additional sanction of awarding expert fees. *Takeda Chem. Indus. V. Mylan Labs.*, 549 F. 3d 1381, 1392 (Fed. Cir. 2008).

Having found this case exceptional, and awarded attorney fees and costs under § 285, the Court does not find that Plaintiff's conduct in this matter was so egregious that it justifies the additional award of expert fees. See Amsted Indus. v. Buckeye Steel Castings Co., 23 F.3d 374, 378 (Fed. Cir. 1994) (award of expert fees reserved for cases where the court makes a finding of fraud or where "the very temple of justice has been defiled"). Defendant's request for expert fees is denied.

d. Prejudgment Interest

Defendant seeks \$5,821,225.69 in prejudgment interest. Defendant argues that the Court should apply the prime interest rate rather than the T-Bill rate. Def.s' Br. at 30. Plaintiff responds that the T-Bill rate is appropriate, because Defendant has not demonstrated that it actually borrowed at the higher interest rate. Sept. 8, 2017, Tr. at 38.

Prejudgment interest is not properly awarded under § 285, but where the Court has made a finding of exceptionality under § 285, it may exercise its inherent authority to award prejudgment interest as a form of equitable relief. *Mathis v. Spears*, 857 F.2d 749, 760 (Fed. Cir. 1988). However, not every prevailing party under § 285 is entitled to an award of prejudgment interest. *Id.* Having already awarded Defendant a large sum in attorney fees and costs under section 285, the Court declines to exercise its discretion to award an additional \$5 million in prejudgment interest. Defendant's request for prejudgment interest is denied.

CONCLUSION

Having found this case exceptional under 35 U.S.C. § 285, Defendant's motion for attorney fees and costs is granted in the reduced amount of \$13,296,559.90 in fees and \$513,258.38 in costs. Defendant's requests for expert fees and prejudgment interest are denied. An appropriate order follows.

DATE: 20 April 308

Senior United States District Court Judge