IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

SOLVAY, S.A.,)
Plaintiff,))
V.)) Civ. No. 06-557-SLR \
HONEYWELL SPECIALTY MATERIALS LLC and HONEYWELL INTERNATIONAL INC.,)))
Defendants.	<i>)</i>)

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MEMORANDUM OPINION

Dated: August **16**, 2011 Wilmington, Delaware ROBINSON District Judge

I. INTRODUCTION

Plaintiff Solvay, S.A. ("Solvay") brought suit against defendants Honeywell Specialty Materials LLC and Honeywell International Inc. (collectively, "Honeywell") asserting, inter alia, infringement of U.S. Patent No. 6,730,817 ("the '817 patent"). The parties cross-moved for summary judgment regarding infringement and validity of the '817 patent. (D.I. 121, D.I. 134) On December 9, 2008, this court granted Honeywell's motion for summary judgment of invalidity of the '817 patent, concluding that Honeywell was the first inventor pursuant to 35 U.S.C. § 102(g). (D.I. 230) The court also granted Solvay's motion for summary judgment of infringement of claims 1, 5-7 and 10-11 of the '817 patent, and granted in part Honeywell's motion for summary judgment of no infringement, concluding that claims 12-18, 21 and 22 of the '817 patent were not infringed. (D.I. 229) On appeal, the Federal Circuit upheld the court's determination on infringement but reversed in part the court's opinion on invalidity, holding that Honeywell was not a prior inventor of the '817 patent for purposes of § 102(g). See Solvay S.A. v. Honeywell Int'l, Inc., 622 F.3d 1367, 1370 (Fed. Cir. 2010).

Presently before the court are: (1) Honeywell's renewed motion for summary judgment of invalidity of the '817 patent under 35 U.S.C. § 102(g) (D.I. 259) and its motion for leave to file same (D.I. 251); (2) Honeywell's motion for summary judgment of no willful infringement (D.I. 274); (3) Honeywell's motion for leave to file a motion for summary judgment of invalidity of the '817 patent under 35 U.S.C. § 102(e) (D.I. 282); and (4) Solvay's motion for leave to file a sur-reply brief in opposition to Honeywell's motion for summary judgment of no willful infringement (D.I. 298). For the reasons that

follow, Honeywell's renewed motion for summary judgment of invalidity under § 102(g) (D.I. 259) is denied, and its motion for leave to file its renewed motion for summary judgment (D.I. 251) is denied as moot. Honeywell's motion for summary judgment of no willful infringement (D.I. 274) is granted. Honeywell's motion for leave to file its motion for summary judgment of invalidity under § 102(e), which was not contemplated by the court's April 29, 2011 scheduling order, is denied. (D.I. 282) Solvay's motion for leave to file a sur-reply brief (D.I. 298) is denied as moot.

II. BACKGROUND¹

Solvay's '817 patent, which has a priority date of October 23, 1995, discloses and claims processes for making 1,1,1,3,3-pentafluoropropane ("HFC-245fa") by reacting 1,1,1,3,3-pentachloropropane ("HCC-240fa") with hydrogen fluoride ("HF") in the presence of a hydrofluorination catalyst. The HFC-245fa product formed by the processes of the '817 patent is one of a group of non-ozone depleting hydrofluorocarbons ("HFC") that were legislatively mandated to replace ozone-depleting chlorofluorocarbons ("CFC") and hydrochlorofluorocarbons ("HCFC"). The claims of the '817 patent relate to processes for making HFC-245fa that include continuously drawing off gaseous HFC-245fa and hydrogen chloride ("HCI") from the reaction mixture.

On July 11, 1994, Honeywell filed a patent application that later issued as United States Patent No. 5,574,192 ("the '192 patent"). Honeywell's '192 patent claims a process for making 245fa by reacting 240fa with hydrogen fluoride in the presence of a

¹A more detailed description of the facts is set forth in both this court's previous opinion, *Solvay, S.A. v. Honeywell Specialty Materials LLC*, 591 F. Supp. 2d 729 (D. Del. 2008), and the Federal Circuit's opinion, *Solvay S.A. v. Honeywell Int'l, Inc.*, 622 F.3d 1367 (Fed. Cir. 2010).

catalyst. (D.I. 286, Ex. 3) Solvay amended the claims of the '817 patent to claim an improvement over the '192 patent which relates to withdrawing 245fa from the reactor continuously as it is being formed. (D.I. 136, Ex. 13)

In early 1994, Honeywell entered into a research contract with the Russian Scientific Center for Applied Chemistry ("RSCAC"), pursuant to which the RSCAC performed process development studies in Russia for the commercial production of HFC-245fa.² (D.I. 264 at 3) The RSCAC sent a report detailing the results of its studies to Honeywell in July 1994. (D.I. 260 at 3) Prior to Solvay's October 1995 priority date, Honeywell used RSCAC's report to duplicate RSCAC's experiments in the United States.³ (D.I. 264 at 4) Honeywell then continued working to develop and perfect its process for the preparation of HFC-245fa throughout the summer of 1995, ultimately filing an application to patent the process in July 1996, which resulted in U.S. Patent No. 5,763,706 ("the '706 patent"). (*Id.*)

III. STANDARD OF REVIEW

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the burden of proving

²For purposes of this proceeding, the parties do not dispute the fact that the process performed by the RSCAC engineers corresponds to the invention claimed in the '817 patent, and that the RSCAC engineers conceived the invention and reduced it to practice in Russia. (D.I. 264 at 3)

³The Federal Circuit found that Honeywell replicated or reproduced the work of the RSCAC engineers. *See Solvay*, 622 F.3d at 1371-72.

⁴Rule 56 was revised by amendment effective December 1, 2010. "The standard for granting summary judgment remains unchanged," and "[t]he amendments will not

that no genuine issue of material fact exists. See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586 n.10 (1986). "Facts that could alter the outcome are 'material,' and disputes are 'genuine' if evidence exists from which a rational person could conclude that the position of the person with the burden of proof on the disputed issue is correct." Horowitz v. Fed. Kemper Life Assurance Co., 57 F.3d 300, 302 n.1 (3d Cir. 1995) (internal citations omitted). If the moving party has demonstrated an absence of material fact, the nonmoving party then "must come forward with 'specific facts showing that there is a genuine issue for trial." Matsushita, 475 U.S. at 587 (quoting Fed. R. Civ. P. 56(e)). The court will "view the underlying facts and all reasonable inferences therefrom in the light most favorable to the party opposing the motion." Pa. Coal Ass'n v. Babbitt, 63 F.3d 231, 236 (3d Cir. 1995). The mere existence of some evidence in support of the nonmoving party, however, will not be sufficient for denial of a motion for summary judgment; there must be enough evidence to enable a jury reasonably to find for the nonmoving party on that issue. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 249 (1986). If the nonmoving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. See Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986).

affect continuing development of the decisional law construing and applying these phrases." Fed. R. Civ. P. 56 advisory committee's note to 2010 Amendments.

IV. DISCUSSION

A. Section 102(g)

1. Prior invention

Pursuant to § 102(g), an applicant may not receive a patent if "before such person's invention thereof the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it." 35 U.S.C. § 102(g)(2); see also Apotex USA, Inc. v. Merck & Co., 254 F.3d 1031, 1035 (Fed. Cir. 2001).

According to the Federal Circuit, this section "retains the rules governing the determination of priority of invention." Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1376 (Fed. Cir. 1986) (quoting Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1444 (Fed. Cir. 1984)). To this end, a party alleging prior invention may establish that he was the first to invent by showing that he was either:

(1) the first to reduce the invention to practice; or (2) the first to conceive the invention of and to then exercise reasonable diligence in attempting to reduce the invention to practice from a date just prior to the applicant's conception to the date of his reduction to practice. See Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co., 308 F.3d 1167, 1189 (Fed. Cir. 2002). The Federal Circuit has explained that

⁵Consistent with the Federal Circuit's decision in this case, the court applies the post-1999 version of § 102(g).

⁶The Federal Circuit has determined that the RSCAC conceived the '817 patent, and that Honeywell's reproduction of the RSCAC's invention did not constitute conception by Honeywell. See Solvay S.A. v. Honeywell Int'l, Inc., 622 F.3d 1367, 1377 (Fed. Cir. 2010). Thus, the issue presently before the court is whether the RSCAC reduced the invention to practice in this country by sending instructions to Honeywell, which Honeywell used to perform the process in the United States.

[a] principal purpose of § 102(g) is to ensure that a patent is awarded to a first inventor. However, it also encourages prompt public disclosure of an invention by penalizing the unexcused delay or failure of a first inventor to share the "benefit of the knowledge of [the] invention" with the public after the invention has been completed.

Checkpoint Sys v. U.S. Int'l Trade Comm'n, 54 F.3d 756, 761 (Fed. Cir. 1995) (citing Paulik v. Rizkalla, 760 F.2d 1270, 1280 (Fed. Cir. 1985)).

The court concludes that, as a matter of law, the RSCAC qualifies as "another inventor" who reduced the invention to practice "in this country." It is undisputed that the RSCAC conceived the invention and reduced it to practice in Russia. *See Solvay*, 622 F.3d at 1371-72. The Federal Circuit also determined that the RSCAC sent instructions to Honeywell on how to perform the process, and that Honeywell used those instructions to duplicate the RSCAC's experiments in the United States. *Id.*According to Solvay, Honeywell's duplication of the RSCAC's process is insufficient for the RSCAC to qualify as "another inventor" under the statute because the Federal Circuit determined that the RSCAC performed the act of inventing in Russia, as opposed to inventing the process in this country. (D.I. 264 at 5-8) However, the Federal Circuit made no determination about whether the RSCAC reduced the invention to practice in the United States. *See Solvay*, 622 F.3d at 1376.

Federal Circuit precedent indicates that the RSCAC's actions are sufficient to establish its conception in this country for purposes of § 102(g)(2), regardless of its activities in Russia. In *Scott v. Koyama*, 281 F.3d 1243 (Fed. Cir. 2002), the Federal Circuit found that Scott conceived an invention in the United States by sending a written disclosure of the process to his assignee's United States subsidiary. More specifically,

the Federal Circuit held that "the inventor of an invention of foreign origin may rely on the date that the invention was disclosed in the United States, as a conception date for priority purposes." *Id.* at 1246-47. However, the Court concluded that Scott's written disclosure of the invention did not constitute a reduction to practice in the United States because the subsidiary did not actually perform the process in the United States. *Id.*As in *Scott*, the RSCAC invented its process abroad and "conceived" it in the United States by disclosing it in writing to a United States affiliate. *Scott* is distinguishable from the facts of the instant case, however, because (unlike the United States subsidiary in *Scott*) Honeywell actually performed the process in the United States based on the information provided by the RSCAC to duplicate the RSCAC's experiments. *See Solvay*, 622 F.3d at 1371-72.

In Holmwood v. Sugavanam, 948 F.2d 1236, 1238-39 (Fed. Cir. 1991), an inventor who conceived and reduced to practice a fungicide abroad was found to have successfully reduced the invention to practice in the United States for purposes of § 102(g) when his assignee sent the fungicide from Germany to a United States affiliate to verify the positive test results. The Federal Circuit held that the fungicide was reduced to practice in the United States as a result of the tests performed here, which showed that the fungicide worked for its intended purpose. *Id.*; see also Therasense, *Inc. v. Becton, Dickinson & Co.*, 560 F. Supp. 2d 835, 865 (N.D. Cal. 2008) (holding that "an initial reduction to practice outside the United States is not fatal to Abbott's attempt to meet its burden of production" where the invention was later successfully performed in the United States). The court concludes that the RSCAC's conception

and reduction to practice in Russia, followed by its communication of instructions to Honeywell and Honeywell's performance of the process in the United States based on those instructions, mirror the facts set forth in *Holmwood* and demonstrate that the RSCAC qualifies as "another inventor" who reduced the invention to practice "in this country" under § 102(g) as a matter of law.

Solvay claims that *Holmwood* and *Scott* are inapposite because they address priority of invention in interferences under § 102(g)(1), as opposed to invalidity based on prior invention under § 102(g)(2). Prior to 1999, § 102(g) did not distinguish between invalidity and interferences, stating that a person shall be entitled to a patent unless,

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

35 U.S.C. § 102(g) (1952 & 1994) (emphasis added). The 1999 amendment to the statute divided the provision into two subsections, with § 102(g)(2) retaining the "made in this country" language for purposes of determining invalidity:

A person shall be entitled to an invention unless – (g)(1) during the course of an interference . . . another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof[,] the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the **invention was made in this country** by another inventor who had not abandoned, suppressed, or concealed it.

35 U.S.C. § 102(g) (2002) (emphasis added). Solvay cites no authority indicating that the language of § 102(g)(2) should be interpreted differently than the same language

had been interpreted before the 1999 amendment.

2. Abandonment, suppression and concealment

If a party establishes prior invention under § 102(g) by clear and convincing evidence, then the burden of production shifts to the patentee to produce evidence sufficient to create a genuine issue of material fact as to whether the party alleging prior invention abandoned, suppressed, or concealed the invention. *Apotex*, 254 F.3d at 1037-38. If the patentee carries this burden of production, then the party alleging prior invention may rebut the evidence of abandonment, suppression or concealment with clear and convincing evidence that affirmative steps were taken to make the invention publicly known. *Id.*; see also Friction Div. Prods., Inc. v. E.I. Du Pont de Nemours & Co., 658 F. Supp. 998, 1013 (D. Del. 1987).

The court concludes that Solvay, as the patentee, has produced evidence "sufficient to create a genuine issue of material fact as to whether the prior inventor had suppressed or concealed the invention." *See Apotex*, 254 F.3d at 1037-38. More specifically, Solvay has produced evidence of a confidentiality agreement between the RSCAC and Honeywell which precluded the RSCAC from disclosing the invention. (D.I. 253, Ex. 2)

Honeywell rebuts this evidence of concealment with evidence of public disclosure: (1) the Russian patent application filed on May 25, 1994; (2) Honeywell's filing of the '706 patent in July 1996; and (3) the September 1997 Solvay Memorandum, in which the RSCAC openly shared its invention with Solvay. (D.I. 260 at 7-8) Although

there is no explicit disclosure requirement in § 102(g),⁷ "the spirit and policy of the patent laws encourage an inventor to take steps to ensure that the public has gained knowledge of the invention which will insure its preservation in the public domain or else run the risk of being dominated by the patent of another." *Apotex*, 254 F.3d at 1038. The court cannot fathom how the '706 patent (filed in July 1996) and the September 1997 Solvay Memorandum notified the public of Honeywell's invention in a manner sufficient to preserve its rights prior to Solvay's October 1995 priority date. Honeywell's motion is denied and, absent further illumination on this legal issue, the court will preclude Honeywell from introducing evidence of these disclosures to the jury.

With respect to the May 1994 Russian patent application, the court concludes that there are genuine issues of material fact as to whether this publication discloses the subject matter of the '817 patent.⁸ Therefore, Honeywell's renewed motion for summary judgment of invalidity under § 102(g) is denied.

B. Willfulness

The Federal Circuit set forth a two-pronged standard for establishing willfulness in *In re Seagate Technology, LLC*, 497 F.3d 1360 (Fed. Cir. 2007), the first prong of which states:

⁷And the court has found no case law on point.

⁸Even if the '706 patent were considered, its relevance to the '817 patent for purposes of § 102(g) is questionable, as the '706 patent includes modifications made by Honeywell to the RSCAC invention. The Federal Circuit held that "[t]he invention at issue is the invention claimed in Solvay's '817 patent, not the one claimed in Honeywell's '706 patent" and Honeywell's '706 patent "is immaterial for the purpose of assessing Honeywell's prior invention defense under § 102(g)(2)." *Solvay*, 622 F.3d at 1379. Likewise, it is not clear from the record as to whether the 1997 Solvay Memorandum discloses the subject matter of the '817 patent.

[T]o establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. The state of mind of the accused infringer is not relevant to this objective inquiry.

Id. at 1371 (internal citations omitted). The existence of this objective risk is "determined by the record developed in the infringement proceeding." Id. The objective prong is generally not met when the accused infringer maintains a reasonable defense to infringement, even if the jury ultimately reaches a verdict of infringement.

See Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc., 620 F.3d 1305, 1319 (Fed. Cir. 2010) (holding that objective prong is generally not met "where an accused infringer relies on a reasonable defense to a charge of infringement"); DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 567 F.3d 1314, 1336 (Fed. Cir. 2009) (concluding that accused infringer presented a substantial question of noninfringement which precluded a finding of objective recklessness despite the jury's ultimate finding of infringement).

If the objective prong is satisfied, the patentee must next establish that "this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer." Seagate, 497 F.3d at 1371. This subjective prong hinges on the fact finder's assessments of the credibility of witnesses. LG Elecs. U.S.A., Inc. v. Whirlpool Corp., _____ F. Supp. 2d _____, Civ. No. 08-234-GMS, 2011 WL 2610177, at *10 (D. Del. July 1, 2011). "The drawing of inferences, particularly in respect of an intent-implicating question such as willfulness, is peculiarly within the province of the

fact finder that observed the witnesses." *Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1225 (Fed. Cir. 2006).

In support of its motion for summary judgment of no willful infringement,

Honeywell contends that it presented credible invalidity defenses which preclude a
finding of willfulness. (D.I. 275 at 7-13) Specifically, Honeywell contends that this
court's prior summary judgment ruling in Honeywell's favor is conclusive evidence that
Honeywell's invalidity defense was credible despite the Federal Circuit's subsequent
reversal of that decision. (*Id.* at 7-9) Moreover, Honeywell contends that its renewed
motion for summary judgment presents additional invalidity defenses which are also
credible and preclude a finding of objective recklessness. (*Id.* at 9-10) Honeywell
further contends that the '817 patent is invalid based on Honeywell's own '192 patent,
and the prosecution history of the '817 patent demonstrates the examiner's doubts as
to the '817 patent's validity. (*Id.* at 10-14) According to Honeywell, to the extent
Solvay's allegations are based on willfulness allegedly occurring after remand from the
Federal Circuit, Solvay cannot prevail because it failed to seek a preliminary injunction.
(*Id.* at 15-16)

Solvay challenges Honeywell's contention of no willfulness only as it pertains to the period following the Federal Circuit's decision on October 13, 2010. (D.I. 285 at 1, 12) ("Solvay's allegation of willful infringement is limited to the time period since the Federal Circuit issued its decision in this case on October 13, 2010.") According to Solvay, Honeywell has no credible non-infringement defenses, and questions remain regarding the credibility of Honeywell's new invalidity defenses. (*Id.* at 12-13, 15-18)

With respect to its failure to seek a preliminary injunction, Solvay contends that the Federal Circuit's decision in *Seagate* does not require a patentee to request a preliminary injunction in cases where such a request would have been futile despite a likelihood of success on the merits. (*Id.* at 14) Solvay contends that Honeywell's litigation misconduct further demonstrates Honeywell's willfulness. (*Id.* at 18-20)

The court concludes that summary judgment of no willfulness is appropriate because Honeywell presented a credible invalidity defense, precluding a finding of objective recklessness despite the Federal Circuit's ultimate rejection of the defense. See Black & Decker, Inc. v. Robert Bosch Tool Corp., 260 Fed. Appx. 284, 291 (Fed. Cir. 2008) ("[C]redible invalidity arguments demonstrate the lack of an objectively high likelihood that a party took actions constituting infringement of a valid patent."). In its December 9, 2008 decision on summary judgment, this court credited Honeywell's § 102(g) invalidity defense, and the court declines to characterize its prior ruling on this point as baseless. The Federal Circuit's ultimate decision to reject Honeywell's § 102(g) defense following an exhaustive analysis is irrelevant to the willfulness inquiry. See DePuy Spine, 567 F.3d at 1336 (finding no willful infringement, despite the jury's ultimate finding of infringement, where accused infringer presented a substantial question of non-infringement).

Moreover, Solvay discredited its own contentions regarding the baselessness of Honeywell's invalidity defenses by failing to move for summary judgment of validity or

⁹The court rejects Solvay's contention that its claim for willfulness, as it pertains to the period after the Federal Circuit's October 13, 2010 decision, should survive summary judgment. Solvay cites no authority permitting a willfulness allegation based upon an interlocutory order by the Federal Circuit.

willfulness and by presenting arguments which suggest Honeywell's invalidity contentions are "substantial, reasonable, and far from the sort of easily-dismissed claims that an objectively reckless infringer would be forced to rely upon." *Honeywell Int'l Inc. v. Universal Avionics Sys. Corp.*, 585 F. Supp. 2d 636, 644 (D. Del. 2008) (internal quotations omitted); *see also Cordance Corp. v. Amazon.com, Inc.*, 639 F. Supp. 2d 406, 416 (D. Del. 2009) (granting surnmary judgment of no willfulness where plaintiff's responses to defendant's invalidity defenses were substantial and plaintiff did not itself move for summary judgment on defendant's primary defenses). Because the court finds that Solvay has not presented evidence sufficient to support a finding of willfulness under *Seagate*, Honeywell's motion for summary judgment of no willful infringement is granted.

IV. CONCLUSION

For the reasons stated, Honeywell's renewed motion for summary judgment of invalidity under § 102(g) is denied, and Honeywell's motion for leave to file its renewed motion for summary judgment is denied as moot. Honeywell's motion for summary judgment of no willfulness is granted. Honeywell's motion for leave to file its motion for summary judgment of invalidity under § 102(e) is denied. Solvay's motion for leave to file a sur-reply brief is denied as moot. An appropriate order shall issue.