

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

PRAXAIR, INC. and PRAXAIR)
TECHNOLOGY, INC.,)
)
Plaintiffs,)
)
v.) Civ. No. 03-1158-SLR
)
ATMI, INC. and ADVANCED)
TECHNOLOGY MATERIALS, INC.,)
)
Defendants.)

Jack B. Blumenfeld, Esquire and Rodger D. Smith II, Esquire of Morris, Nichols, Arsht & Tunnell, Wilmington, Delaware. Counsel for Plaintiff. Of Counsel: Herbert F. Schwartz, Esquire, Christopher J. Harnett, Esquire and Steven Pepe, Esquire of Ropes & Gray LLP, New York, New York, Steven T. Trinker, Esquire of Praxair, Inc., Danbury, Connecticut.

Frederick L. Cottrell, III, Esquire and Alyssa M. Schwartz, Esquire of Richards, Layton & Finger, P.A., Wilmington, Delaware. Counsel for Defendants. Of Counsel: Nicholas L. Coch, Esquire, Theodore J. Mlynar, Esquire and Keith A. Walter, Esquire of Kramer Levin Naftalis & Frankel, LLP, New York, New York.

OPINION

Dated: June 13, 2007
Wilmington, Delaware


ROBINSON Chief Judge

I. INTRODUCTION

The court tried the single issue of inequitable conduct in a bench trial on December 12, 2005. The court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331, 1338(a) and 2201(a). Having considered the documentary evidence and testimony, the court makes the following findings of fact and conclusions of law pursuant to Fed. R. Civ. P. 52(a).

II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

A. Procedural History

1. On December 22, 2003, Praxair, Inc. and Praxair Technologies, Inc. (collectively "Praxair") filed this action against ATMI, Inc. and Advanced Technology Materials, Inc. (collectively "ATMI") for infringement of certain claims of United States Patent Nos. 6,045,115 ("the '115 patent"), 6,007,609 ("the '609 patent") and 5,937,895 ("the '895 patent"). (D.I. 1) The case was tried to a jury¹ and on December 7, 2005, the jury returned a verdict in favor of Praxair finding all the asserted claims were infringed by ATMI and the patents were not invalid. (D.I. 282)

2. Following the jury trial, the court held a bench trial regarding ATMI's inequitable conduct defenses. The court has previously issued Findings of Fact and Conclusions of Law with respect to the merits of these defenses. (D.I. 328); Praxair, Inc. v. ATMI, Inc., 445 F. Supp. 2d 473 (D.Del. 2006). The court turns now to the balance of the issues at bar.

¹Only the '115 patent and the '609 patent were tried to the jury.

B. The Patents In Suit And The Technology At Issue

3. The patents in suit disclose embodiments of an apparatus which safely controls the discharge of pressurized fluids from the outlet of pressurized tanks. (D.I. 131 at 7) The inventions disclosed by the patents help control the handling, storage and delivery of toxic fluids and constrain the flow of gas during normal operation, as well as during any kind of valve mishandling or downstream failure. (Id. at 8)

4. The '115 patent, entitled "Fail-Safe Delivery Arrangement for Pressurized Containers," teaches the use of a flow restrictor inside the pressurized container that minimizes the discharge of gas flow from the container. (Id. at 10) The '609 patent, entitled "Pressurized Container with Restrictor Tube Having Multiple Capillary Passages," teaches a flow restrictor in the form of multiple capillary passages which minimize the discharge of toxic gas from the pressurized tank. (Id. at 11)

5. In 1997, ATMI developed a gas cylinder product named VAC® (Vacuum-Actuated Cylinder). (D.I. 139 at 6) VAC® is designed to reduce the risks associated with using high-pressure toxic gases by pre-regulating the pressure at which gas leaves the cylinder with either one or two pressure regulators inside the cylinder. (Id. at 6) The VAC® technology incorporates a pressure regulator in the cylinder before the valve assembly. (Id.) The VAC® pressure regulator controls pressure using an internal pressure-sensing assembly ("PSA"). (Id. at 12) The PSA is calibrated by filling an internal bellows with a helium/argon mixture to a preset pressure and sealing it. When a pressure below the PSA set point is applied downstream of the pressure regulator, the bellows in the PSA expands, opening the valve and allowing gas to flow through the regulator. (Id. at 12) Significantly, the VAC® products also incorporate two or three

sintered² metal filters manufactured by Mott Corporation (*id.* at 10), which, according to Praxair, “in fact [are] flow restrictors” that meet the limitations of the asserted claims.

(D.I. 165 at 33-35)

C. Material Prior Art References

6. ATMI asserted at trial that three prior art references constitute material information withheld from the United States Patent and Trademark Office (“PTO”): Max Light devices; Restricted Flow Orifices (“RFOs”); and United States Patent No. 5,409,526 (the “Zheng patent”).³ The court previously ruled that the Max Light devices are not material to the prosecution of the ‘609 and ‘115 patents. 445 F. Supp. 2d at 479. In contrast, the court found that RFOs, as commonly used in the industry (the “RFO art”), and the Zheng patent are material references. *Id.* at 479-80.

7. An RFO is a flow restrictor device presenting small holes, as small as 0.1 millimeters (mm), through which gas flows. (D.I. 279 at 833:7-13) The size of the holes determines the rate of flow. The court previously found that RFOs are material because, as presented to the court, the description of RFOs “is similar to that of a

²The term “sintering” refers to a high temperature solid-state diffusion bonding process in which metal powder is heated to a temperature just below the melting point of metal. The metal bonds to create a porous media having a random internal structure that can be seen in a Scanning Electron Microscope (“SEM”) image. (D.I. 139 at 11)

³The court previously denied, as untimely, ATMI’s motion for leave to file its Second Amended Answer and Counterclaims, which contained its assertion that the failure to disclose the copendency of the ‘609 and ‘115 applications to the respective examiners during prosecution constitutes inequitable conduct. (D.I. 124) The court does not address the merits of these same arguments presented in ATMI’s papers. (D.I. 295 at 18-25; D.I. 303 at 9-13)

capillary, as required in the patents[.]”⁴ 445 F. Supp. 2d at 480.

8. The Zheng patent, entitled “Apparatus for Supplying High Purity Fluid,” was filed on October 5, 1993 and issued on April 25, 1995. The Zheng patent discloses “[a]n apparatus for supplying high purity gas” which includes a filtering unit comprising “an inlet, a first filter for removing fine particulates, layers of adsorbent and absorbent for removing impurities, and a second filter for removing fine particulates.” (D.I. 301 at ¶ 21) The Zheng patent further discloses the use of sintered metal filters in the gas flow. The court previously found that the Zheng patent is material because its sintered filter functions as a flow restrictor. 445 F. Supp. 2d at 479. In addition, the court stated that “there was evidence that sintered metal filters may contain capillary passages[.]” as required in the patents. Id.

D. Parties Charged With Inequitable Conduct

9. ATMI accuses four individuals of committing inequitable conduct during the prosecution of the ‘609 and ‘115 patents: Mr. John Tolomei, Mr. David LeFebre, Mr. Thomas Martin and Mr. Roy Semerdjian.

10. Mr. Tolomei is Chief Patent Counsel for UOP, LLP (“UOP”) in Chicago,

⁴Praxair incorrectly states that ATMI has just recently linked its claims of inequitable conduct regarding the RFO art to DTX-23, a November 1990 article by Suzanne M. Larson entitled “The Flow Restrictor Orifice in the Outlet of the Compressed Gas Cylinder Valve.” (D.I. 300 at 30) DTX-23, and the testimony surrounding this exhibit, was offered by ATMI as proof of the state of the RFO art during the relevant timeframe; ATMI did not allege that the applicants were aware of DTX-23 specifically or intentionally withheld DTX-23 from the PTO. Praxair’s (post-trial) contention that ATMI failed to comply with Federal Rule of Civil Procedure 9(b) in pleading its inequitable conduct contentions regarding the RFO art with particularity are both without merit and untimely; Praxair has waived any such objections to the pleadings.

Illinois, and has been practicing law as a patent attorney since 1983. (D.I. 283 at 20-21) ATMI accuses Mr. Tolomei of intentionally withholding the Zheng patent and the RFO art from the PTO during the prosecution of the '609 and '115 patents. During his career as a patent attorney, Mr. Tolomei has been responsible for prosecuting over 400 issued patents, most of which have been licensed to third parties. Prior to this case, Mr. Tolomei has never been charged with committing inequitable conduct. (Id. at 22:7-23:3)

11. ATMI accuses Mr. LeFebre of intentionally withholding the Zheng patent and the RFO art from the PTO during the prosecution of the '609 and '115 patents. From 1992 to 1999, Mr. LeFebre worked at the Mat/Sen group of UOP. (Id. at 136:19-138:4) During that time, Mr. LeFebre was named as an inventor on both the '609 and '115 patents.

12. ATMI accuses Mr. Martin of intentionally withholding the RFO art from the PTO during the prosecution of the '609 and '115 patents. Mr. Martin also worked at the Mat/Sen group of UOP and is a named inventor on the '609 and '115 patents.

13. ATMI accuses Mr. Semerdjian of intentionally withholding the RFO art from the PTO during the prosecution of the '609 patent. Mr. Semerdjian also worked at the Mat/Sen group of UOP and is a named inventor on the '609 patent.

F. Inequitable Conduct Standard

14. Applicants for patents and their legal representatives have a duty of candor, good faith, and honesty in their dealings with the PTO. Molins PLC v. Textron, Inc., 48 F.3d 1172, 1178 (Fed. Cir. 1995); 37 C.F.R. § 1.56(a). This duty is predicated on the fact that "a patent is an exception to the general rule against monopolies and to the

right of access to a free and open market.” Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 816 (1945). The duty of candor, good faith, and honesty includes the duty to submit truthful information and the duty to disclose to the PTO information known to patent applicants or their attorneys which is material to the examination of a patent application. Elk Corp. of Dallas v. GAF Bldg. Materials Corp., 168 F.3d 28, 30 (Fed. Cir. 1999). A breach of this duty constitutes inequitable conduct. Molins, 48 F.3d at 1178.

15. If it is established that a patent applicant engaged in inequitable conduct with respect to one claim, then the entire patent application is rendered unenforceable. Kingsdown Med. Consultants v. Hollister Inc., 863 F.2d 867, 877 (Fed. Cir. 1988). Additionally, “[a] breach of the duty of candor early in the prosecution may render unenforceable all claims which eventually issue from the same or a related application.” Fox Indus., Inc. v. Structural Pres. Sys., Inc., 922 F.2d 801, 803-04 (Fed. Cir. 1990).

16. A finding of inequitable conduct is “an equitable determination” and, therefore, “is committed to the discretion of the trial court.” Monon Corp. v. Stoughton Trailers, Inc., 239 F.3d 1253, 1261 (Fed. Cir. 2001).

17. In order to establish unenforceability based on inequitable conduct, a defendant must establish by clear and convincing evidence that: (1) the omitted or false information was material to patentability of the invention; (2) the applicant had knowledge of the existence and materiality of the information; and (3) the applicant intended to deceive the PTO. Molins, 48 F.3d at 1178.

18. A determination of inequitable conduct follows a two-step analysis. The withholding of information must first meet threshold findings of materiality and intent.

Id. After determining that the applicant withheld material information, the court must decide whether the applicant acted with the requisite level of intent to mislead the PTO. See Baxter Int'l, Inc. v. McGaw Inc., 149 F.3d 1321, 1327 (Fed. Cir. 1998). "Intent to deceive cannot be inferred solely from the fact that information was not disclosed; there must be a factual basis for finding a deceptive intent." Hebert v. Lisle Corp., 99 F.3d 1109, 1116 (Fed. Cir. 1996). That is, "the involved conduct, viewed in light of all the evidence, including evidence indicative of good faith, must indicate sufficient culpability to require a finding of intent to deceive." Kingsdown, 863 F.2d at 876. A "smoking gun" is not essential to establish an intent to deceive. See Merck, 873 F.2d at 1422. An inference of intent, nevertheless, is warranted where a patent applicant knew or should have known that the withheld information would be material to the PTO's consideration of the patent application. Critikon, Inc. v. Becton Dickinson Vascular Access, Inc., 120 F.3d 1253, 1256 (Fed. Cir. 1997).

19. Once materiality and intent to deceive have been established, the trial court must weigh them to determine whether the balance tips in favor of a conclusion of inequitable conduct. N.V. Akzo v. E.I. DuPont de Nemours, 810 F.2d 1148, 1153 (Fed. Cir. 1987). The showing of intent can be proportionally less when balanced against high materiality. Id. In contrast, the showing of intent must be proportionally greater when balanced against low materiality. Id.

20. Because a patent is presumed valid under 35 U.S.C. § 282, inequitable conduct requires proof by clear and convincing evidence. Manville Sales Corp. v. Paramount Sys., Inc., 917 F.2d 544, 551 (Fed. Cir. 1990).

G. The RFO Art

1. Cumulativeness and Level of Materiality

21. The court previously found that RFOs are material because their description “is similar to that of a capillary, as required in the patents[.]” 445 F. Supp. 2d at 480.

22. There is no disclosure in the ‘609 or ‘115 patents of the RFO art nor of the use of flow restrictors, and Praxair does not point to any prior art before the PTO that discloses a flow restrictor in the flow path. (D.I. 300 at 29-32) As the court noted previously, the applicants argued during the prosecution of the ‘609 patent that: (1) The prior art did not teach the claimed “extreme limitation in flow” used “to provide a commercially practical container” that prevents “the catastrophic discharge” of toxic contents; (2) Existing safety measures were limited to “highly complex methods” and “elaborate systems;” (3) There was no indication in the prior art to use “severe flow restriction” to “overcome[] the problems of delivering highly toxic fluids from portable containers;” and (4) “[N]one of the prior art comes close to disclosing a restriction in the flow path from a pressurized container that has a diameter that does not exceed 0.2 mm.” 445 F. Supp. 2d at 480 n.8.

23. The evidence adduced at trial demonstrates, however, that RFOs were widely commercially used to provide user protection from the discharge of gases from compressed gas cylinders – a safety measure that appears neither “highly complex” nor “elaborate.” (DTX-23 at ATMI-036236; D.I. 279 at 843:4-13) The flow limitation provided by RFOs can be significant. (DTX-23 at ATMI-036242-43 (“The [RFO] can and does reduce the flow rate in excess of 99%[.]”)) Additionally, conventional RFOs had standardized diameters as small as 0.1 mm. (Id. at ATMI-036237 (“It seems like the industry prefers the 0.010-inch diameter flow restrictor orifice with a 2-micron

filter.”))

24. On this record, the court finds that the withheld RFO prior art was not cumulative. In view of the fact that the applicants could not have made several arguments in furtherance of patentability had the RFO art been before the PTO, the level of materiality of the RFO art is sufficiently high so as to support an ultimate finding of inequitable conduct. See Afga Corp. v. Creo Prods. Inc., 451 F.3d 1366, 1377-80 (Fed. Cir. 2006) (upholding district court’s ultimate finding of inequitable conduct where the omitted prior art “established a prima facie case of unpatentability” taken either alone or in combination, and was “inconsistent with Afga’s position during examination[.]”)⁵

2. Knowledge

25. Mr. LeFebre, Mr. Martin and Mr. Tolomei each testified at trial that they were aware of the conventional use of RFOs during the relevant timeframe. (D.I. 283 at 91:10-19, 146:8-91:10-19, 144:21-145:15, 146:8-147:11, 193:8-25) Mr. Martin testified that RFOs were typically put in the outlet of a valve, downstream of the cylinder valve, and were “conventional device[s] in gas dispensing for [] ion implantation” prior to his invention, and that this concept “was old” at that time.⁶ (D.I. 283 at 193:8-194:25) Mr.

⁵Praxair asserts that the court’s definition of the claim terms (so as to preclude the possibility that the flow restrictor of the inventions is located outside of the tank) is somehow relevant to the materiality of prior art RFOs which, as described in DTX-23, are located in the valve assembly further downstream of the outlet port. (D.I. 300 at 30-31; D.I. 234 at 5-6) Prior art need not be invalidating prior art to be material. See Afga Corp., 451 F.3d at 1373 (citing Digital Control, Inc. v. Charles Machine Works, 437 F.3d 1309, 1316 (Fed. Cir. 2006)).

⁶Mr. Martin’s testimony was provided by videotaped deposition, taken in November 2004. (D.I. 283 at 184-185; DTX-842)

Tolomei testified that, in the 1997 to 2000 time frame, he was aware of the prior art use of RFOs in the outlet port of a valve head of a pressurized gas cylinder. (Id. at 91:10-19) Mr. LeFebre testified that between 1975 and 1980, he built devices with RFOs for his own use in a silicon tetrachloride process in order to limit the escape of toxic gases.⁷ (Id. at 145:19-147:25)

26. Ronald Fuhrhop, a valve and cylinder expert for Praxair, testified at trial that he worked with RFOs at Praxair as early as 1992. (D.I. 283 at 181:8-11 (“The valves that were filled in the systems typically used restrictive flow orifices to put on after the cylinders were filled from the systems that I was working on.”)). Mr. Fuhrhop stated that Praxair has used cylinders with conventional RFOs since this time. (Id. at 181:25-182:8 (“Typically, [Praxair used] a stainless steel threaded device with a hole drilled in the middle. Some [RFOs] would have filters and some would not.”); 183:4-15; 184:15-21).

3. Intent to deceive

27. The evidence demonstrates that RFOs were well known in the art and were used by Praxair prior to the filing of the ‘115 and ‘609 patents. Mr. LeFebre, Mr. Martin and Mr. Tolomei had knowledge of this highly material art, yet there is no indication that they disclosed it to the PTO.⁸ Praxair does not offer an explanation for this omission; rather, it argues that “[k]nowledge of the existence of RFOs does nothing more to prove intent than does knowledge about any other particular mechanical structure[.]” (D.I. 300

⁷Mr. LeFebre’s testimony was also provided by videotaped deposition, also taken in November 2004. (D.I. 283 at 135; DTX-840)

⁸The parties point to no evidence adduced at trial regarding the knowledge of Mr. Martin or Mr. Semerdjian.

at 30 n.19) In view of the high materiality of the RFO art withheld from the PTO and the absence of any explanation for the nondisclosure, an intent to deceive may be properly inferred in this case. See Bruno Independent Living Aids, Inc. v. Acorn Mobility Services, Ltd., 394 F.3d 1348, 1354-55 (Fed. Cir. 2005) (holding that the district court did not err in drawing an inference of deceptive intent in view of the high materiality of the omitted prior art) (citing LaBounty Mfg., Inc. v. U.S. Int'l Trade Comm'n, 958 F.2d 1066, 1076 (Fed. Cir. 1992) (“The evidence amply supports an inference that LaBounty acted with culpable intent to mislead or deceive the PTO by withholding its own known prior art devices and by making an argument for patentability which could not have been made had the art been disclosed.”).⁹

H. The Zheng Patent

1. Level of materiality

28. In view of the fact that the Zheng patent, unlike the prior art cited to the examiner during prosecution of the '609 and '115 patents, teaches a pressure drop across the filter that suggests a restriction in flow, the court determined that the Zheng

⁹As the Federal Circuit has noted, there were circumstances in Bruno beyond the lack of a good faith explanation for the omission from which one could infer intent. See Warehouse, Inc. v. Fisher Tooling Co., Inc., 439 F.3d 1335, 1342 (Fed. Cir. 2006). Specifically: (1) the omitted reference in Bruno was highly material, insofar as the patentee made an argument to secure patentability that it could not have made successfully if it had disclosed the reference; and (2) “[t]he fact that an official of Bruno, who was involved in both the [Food and Drug Administration (“FDA”)] and PTO submissions, chose to disclose the [prior art] to the FDA, but not to the PTO[.]” Bruno, 394 F.3d at 1354. In the case at bar, there was no selective disclosure to one agency and not another. However, the fact that Praxair was using “old” RFO technology in its own cylinders (which it shipped to customers) for several years prior to filing the '115 and '609 patents (D.I. 283 at 181:25-184:21), and that Mr. LeFebre built devices with RFOs himself (Id. at 145:19-147:25), buttress the inference of intent permitted under Bruno in view of the high materiality present here. Bruno, 394 F.3d at 1354.

patent is a material reference, and is not cumulative of the prior art of record. 445 F. Supp. 2d at 479. ATMI has not pointed to any particular evidence or made any argument that would compel a finding of “high” materiality. Compare Cargill, Inc. v. Canbra Foods, Ltd., 476 F.3d 1359, 1367 (Fed. Cir. 2007) (omitted prior art was highly material where “the district court found that the omitted test data was related to ‘the heart of the question that bedeviled the examiner’”); PerSeptive Biosystems, Inc. v. Pharmacia Biotech, Inc., 225 F.3d 1315, 1321 (Fed. Cir. 2000) (stating that “[t]here can be no doubt that . . . intentional misrepresentations, omissions and half-truths to the PTO, made as a persistent course of conduct, are highly material.”) (internal quotations omitted).

2. Knowledge

29. Mr. Tolomei was clearly aware of the Zheng patent during the prosecution of the ‘609 and ‘115 patents.¹⁰ While prosecuting the ‘609 and ‘115 patents, Mr. Tolomei simultaneously prosecuted an application which later issued as U.S. Patent No. 5,980,599 (“the ‘599 application”).¹¹ The specification ‘599 application states that [the Zheng patent] discloses an apparatus arrangement for filling a cylinder with

¹⁰In contrast, Mr. LeFebre stated that had neither seen nor read the Zheng patent prior to his deposition in 2004. (D.I. 283 at 173:1-7) Praxair points to no comparable testimony with respect to the knowledge of either Mr. Martin or Mr. Semerdjian. (D.I. 300) The knowledge of the prosecuting attorney, however, is attributable to the applicants as a matter of law. See FMC Corp. v. Manitowoc Co., 835 F.2d 1411, 1415 n.8 (Fed. Cir. 1987).

¹¹The ‘599 application was filed on March 27, 1998, and issued on November 9, 1998. The application that issued as the ‘609 patent was filed before the ‘599 application, on December 18, 1997, was pending contemporaneously with that application, and issued on December 28, 1999. The application that issued as the ‘115 patent was filed on April 17, 1998, and issued on April 4, 2000.

a gas through one port defined in a cylinder head and discharging gas through another port into which a purifier supplies exiting gas. While [the Zheng patent] solves problems related to contaminating the purifier with incoming gas, the need to provide two separate ports through the limited cross-section of the cylinder head impedes rapid filling of the cylinder with gas.

(D.I. 283 at 30:21-31:9; DTX-740 at p.2) At trial, Mr. Tolomei had no recollection of focusing on the relevant disclosure of the Zheng patent while prosecuting the '609 or '115 patents.¹² (D.I. 283 at 31:19-22) Mr. Tolomei stated that, in his view, the Zheng patent does not describe a filter with capillary passages, and does not describe placing an inlet to the gas flow path at the axial radial midpoint of a tank. (Id. at 31:23-32:5) Praxair takes the position that, in view of this understanding of the disclosure of Zheng, “[i]t is not at all surprising that Mr. Tolomei would not cite the Zheng patent in applications directed to different technology.” (D.I. 300 at 23)

3. Intent to Deceive

30. A finding of intent must be predicated on a factual basis. See M. Eagles, 439 F.3d at 1341 (citation omitted). The court finds Mr. Tolomei’s testimony regarding the differences between the Zheng patent and the inventions of the '115 and '609 patents to be credible. (D.I. 283 at 31:23-32:5) Mr. Tolomei did not affirmatively state that he formed a good faith belief during the prosecution of the '115 and '609 patents that disclosure of the Zheng patent was not necessary due to the differences he

¹²Mr. Tolomei also had no recollection of concluding that the Zheng patent was cumulative over U.S. Patent No. 4,738,693 with respect to the '609 or '115 patents during the prosecution of those patents. (D.I. 283 at 37:5-9)

The court generally agrees with Praxair that, if Tolomei had a good faith belief that the disclosure of the Zheng patent was not necessary, “the fact that neither Mr. Tolomei, nor the Examiner, cited any of the art that was cited in the '599 in-tank purifier patent during prosecution of the '609 or '115 patents” supports the reasonableness of Tolomei’s belief. (D.I. 300 at 23)

perceived; however, the absence of a good faith explanation for a nondisclosure, without more, cannot rise to the level of clear and convincing evidence. See id., 439 F.3d at 1341. The court, therefore, finds that the threshold level of intent required for inequitable conduct was not demonstrated with respect to the Zheng patent.

III. CONCLUSION

For the reasons set forth above, the court finds that the '115 and '609 patents are invalid for inequitable conduct regarding Mr. LeFebre, Mr. Martin and Mr. Tolomei's failure to disclose the RFO art. An appropriate order shall issue.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

PRAXAIR, INC. and PRAXAIR)
TECHNOLOGY, INC.,)
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Plaintiffs,)
)
v.)
)
ATMI, INC. and ADVANCED)
TECHNOLOGY MATERIALS, INC.,)
)
Defendants.)

Civ. No. 03-1158-SLR

ORDER

At Wilmington this 13th day of June, 2007, consistent with the opinion issued this same date;

IT IS ORDERED that the '115 and '609 patents are unenforceable for inequitable conduct.

IT IS FURTHER ORDERED that, on or before June 30, 2007, the parties shall submit a joint proposed order of judgment for the court's signature.


United States District Judge