

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

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

Civ. No. 03-1158-SLR

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Jack B. Blumenfeld, Esquire and Rodger D. Smith II, Esquire of Morris, Nichols, Arsht & Tunnell LLP, 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 Defendant. Of Counsel: Nicholas L. Coch, Esquire, and Theodore J. Mlynar, Esquire of Kramer Levin Naftalis & Frankel, LLP, New York, New York, Matthew D. Powers, Esquire, Timothy E. DeMasi, Esquire, and Michael Eisenberg, Esquire of Weil, Gotshal, & Manges LLP, New York, New York.

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**MEMORANDUM OPINION**

Dated: March 7<sup>th</sup>, 2007  
Wilmington, Delaware

  
ROBINSON, Chief Judge

## I. INTRODUCTION

Praxair, Inc. and Praxair Technology, Inc. (collectively called “Praxair”) filed the current lawsuit against ATMI, Inc. and Advanced Technology Materials, Inc. (collectively called “ATMI”) on December 22, 2003, alleging infringement of Praxair’s U.S. Patent Nos. 6,007,609 (“the ‘609 patent”), 6,045,115 (“the ‘115 patent”), and 5,937,895. (D.I. 1) The case was tried to a jury<sup>1</sup> for six days and, on December 7, 2005, the jury returned a verdict finding all the asserted claims were infringed by ATMI and the patents were not invalid. (D.I. 282) Defendants filed a motion for judgment as a matter of law or, in the alternative, for a new trial (D.I. 272), which was denied on August 17, 2006. (D.I. 329) Currently before the court is plaintiffs’ motion for a permanent injunction. (D.I. 309)

## II. BACKGROUND

Many manufacturing processes involve the use of corrosive, pyrophoric, highly toxic or otherwise dangerous gases, such as trifluoride, silane, arsine or phosphine. (D.I. 131 at 7) Gases, including highly hazardous materials, have traditionally been supplied in standard high-pressure cylinders or pressurized tanks. (D.I. 139 at 5) High pressure gas distribution systems used for delivering hazardous specialty gases in industrial operations present a potential for toxic release of gas into working areas and the environment. (Id. at 3)

The patents in suit disclose embodiments of an apparatus which safely control the discharge of pressurized fluids from the outlet of pressurized tanks. (D.I. 131 at 7)

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<sup>1</sup>Only the ‘115 patent and the ‘609 patent were tried to the jury.

The inventions disclosed by the patents help control the handling, storage and delivery of toxic fluids and constrain the flow of gas during normal operations, as well as during any kind of valve mishandling or downstream failure. (Id. at 8)

The '115 patent teaches the use of a flow restrictor inside a pressurized container that minimizes the discharge of gas flow from the container. (D.I. 131 at 10) The '609 patent teaches a flow restrictor, in the form of multiple capillary passages, which minimizes the discharge of toxic gas from a pressurized tank. (Id. at 11) Praxair currently manufactures and sells a dispensing cylinder called Uptime™, which the parties do not dispute is an embodiment of at least the '115 and '609 patents. (D.I. 315 at 10; D.I. 317)

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) The VAC® products also incorporate two or three sintered metal filters manufactured by Mott Corporation. (Id. at 10)

### III. STANDARD OF REVIEW

In eBay Inc. v. MercExchange, L.L.C., 126 S.Ct. 1837 (2006) (vacating and remanding MercExchange, L.L.C. v. eBay Inc., 401 F.3d 1323, 1339 (2005)) (hereinafter “eBay”), the Supreme Court overruled the Federal Circuit’s longstanding “general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances.”<sup>2</sup> Permanent injunctions in patent cases must be based on a case-by-case assessment of the traditional equitable factors governing injunctions. Id. at 1839. That is, to be awarded a permanent injunction, a plaintiff must demonstrate: “(1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.” Id. “[T]he decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts, and that discretion must be exercised consistent with traditional principles of equity, in patent disputes no less than in other cases governed by such standards.” Id. at 1841.

### IV. DISCUSSION

Praxair’s Uptime™ cylinder is in direct and head-to-head competition with ATMI’s VAC® cylinder, as Uptime™ and VAC® are the only two mechanical-based systems for

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<sup>2</sup>The eBay decision was issued on May 15, 2006, six days after Praxair filed its motion for a permanent injunction. (D.I. 309) Praxair subsequently filed an amended opening brief on May 24, 2006, in which it addressed eBay. (D.I. 315)

the controlled delivery of industrial gases on the market.<sup>3</sup> (D.I. 315 at 11; D.I. 323 at 6-7) VAC®, therefore, is taking sales from Uptime™, an “important growth product” for Praxair, and (according to Praxair) continues to erode the exclusivity to which Praxair is entitled through the ownership of its patents. (D.I. 315 at 6; D.I. 323 at 6-7) This “stolen” market share “work[s] a substantial and unjustifiable hardship on Praxair,” which Praxair asserts cannot be remedied with money damages alone. (D.I. 315 at 12; D.I. 323 at 7-8) To remedy this situation, Praxair requests that the court enjoin all use of VAC® products by ATMI’s customers, and order a mandatory recall of all VAC® cylinders to which it retains title, as well as a voluntary recall of all VAC® cylinders whose title has passed from ATMI. (D.I. 309)

Praxair and ATMI are both large companies with revenues in the hundreds of millions of dollars annually. Praxair asserts that ATMI’s sales of VAC® cylinders account for approximately 1% of ATMI’s total revenues (\$281 million in 2005). (D.I. 323 at 9; D.I. 317 at 14) Evidence was introduced at trial which indicates that ATMI achieved over \$6 million in VAC® sales between 2001 (in which year sales totaled \$358,000) and the first nine months of 2005 (in which period sales exceeded \$2 million), with sales steadily increasing over time. (D.I. 278 at 635-36) Praxair states that “[e]ven a casual review of ATMI’s website and SEC filings confirms that ATMI offers a broad array of products,” including SDS® gas cylinders which were the original “gold standard” in the gas delivery systems industry. (D.I. 315 at 12 & n.7) ATMI

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<sup>3</sup>It appears from the record that several non-mechanical based systems for the controlled delivery of industrial gases exist on the market, such as ATMI’s SDS® product, which may compete with Uptime™ and VAC® in the industrial gas delivery market overall. Praxair has not provided information regarding this market.

argues that VAC® sales are central to its business, but Uptime™ sales account for only 7% of Praxair's overall sales according to its 2005 annual report. (D.I. 317 at 9)

Praxair asserts that the public interest is generally served by the enforcement of patent rights. (D.I. 315 at 15, citing Eaton Corp. v. Parker-Hannifin Corp., 292 F. Supp. 2d 555, 582-83 (D.Del. 2003) (quotation omitted)) ATMI has presented evidence that an injunction would force its customers, semiconductor manufacturers running billion-dollar fabrication plants, to incur significant costs by shutting down operations to qualify an alternative gas source or to switch to alternate cylinders.<sup>4</sup> (D.I. 317 at 9-11) Praxair has presented evidence that manufacturers could switch to other qualified non-infringing gas delivery sources during routine maintenance.<sup>5</sup> (D.I. 323 at 2) ATMI retains title to most of its VAC® cylinders; however, its customers own the gas stored in the cylinders, which gas is needed to run the plants. (Id. at 9, 13)

Under eBay, a plaintiff must prove that it is entitled to its statutory right to exclude by demonstrating, inter alia, irreparable injury and the inadequacy of legal remedies. Though the quantum of evidence required is relatively unclear, the court finds that Praxair has not met its burden under eBay to put forward sufficient proof vis-à-vis the broad scope of the relief requested. Praxair generally argues that VAC®'s presence in the market will cause Praxair to "likely lose additional market share, profits, and

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<sup>4</sup>ATMI has provided affidavits from its Director of Marketing (James A. Dietz) and its expert (Dr. Alexander D. Glew). However, these affidavits do not cite to any underlying documents or facts regarding particular customers. (D.I. 319, 320)

<sup>5</sup>Praxair has provided a declaration from Joseph M. Young, business manager for Praxair's UpTime™ products, which does not cite to any underlying documents or facts regarding particular customers. (D.I. 324)

goodwill,” without further detail. Praxair has not provided or described any specific sales or market data to assist the court, nor has it identified precisely what market share, revenues, and customers Praxair has lost to ATMI. Compare Novozymes A/S v. Genecor International, Inc. et al., No. Civ. A. 05-160, 2007 WL 506828, \*4 & \*18 (D.Del. Feb. 16, 2007) (granting permanent injunction where evidence demonstrated that plaintiff originally secured an 80% market share with its patented product, which fell to approximately 50% after infringing competitor’s market entry); Transocean Offshore Deepwater Drilling, Inc. v. Globalsantafe Corp., No. Civ. A. 03-2910, 2006 WL 3813778, \*4 (S.D.Tex. Dec. 27, 2006) (granting permanent injunction requiring structural modifications to infringing deepwater drilling rigs where “the customer base for deep water drill rigs is small, and [defendant] has not only used [its] rigs equipped with the infringing structure to compete for the same customers and contracts as [plaintiff], but also to win contracts over competing bids from [plaintiff]”).

While money damages are generally considered inadequate to compensate for the violation of a patentee’s right to exclude, Praxair nonetheless had a burden to iterate specific reasons why ATMI’s infringement can not be compensated for with a money award. TiVo Inc. v. EchoStar Communications Corp., 446 F.Supp.2d 664, 669-70 (E.D. Tex. 2006) (granting permanent injunction where plaintiff was “a relatively new company with only one primary product,” and the parties agreed that customers tend to remain loyal to the company from which they obtained their first DVR recorder, “shaping the market to [p]laintiff’s disadvantage and result[ing] in long-term customer loss”). Praxair has not explained why it may have “difficulties calculating damages going forward,” nor how money damages could not adequately compensate for “lost market

share” or any “lost research opportunities.”<sup>6</sup> (D.I. 315 at 11) Both parties cite to evidence demonstrating that the VAC®/UpTime™ sales are not critical to either party’s overall corporate success. Praxair’s desire to become a monopoly supplier in its product’s market is hardly unique, and is not conclusive evidence of any factor.

Praxair has not demonstrated that it is entitled, at this time, to the broad scope of injunctive relief it has requested. Praxair’s motion for a permanent injunction is therefore denied. (D.I. 309) Praxair may renew its motion for injunctive relief following appellate review of the jury verdict. An appropriate order shall issue.

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<sup>6</sup>Praxair states that it spends \$75 million per year on research and development to bring innovative products like UpTime® to market (D.I. 323 at 5) and, if stripped from its ability to enforce its statutory right to exclude, Praxair would have “no incentive to innovate,” and its patents would be “effectively meaningless” (D.I. 323 at 11-12). Aside from its research incentive, Praxair does not explain why money damages could not suffice to compensate for any lost “opportunities” to conduct research due to budgetary constraints.



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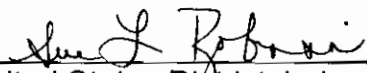
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**ORDER**

At Wilmington this 1<sup>st</sup> day of March 2007, consistent with the memorandum opinion issued this same date;

IT IS ORDERED that Praxair's motion for a permanent injunction (D.I. 309) is denied without prejudice to renew.

  
United States District Judge