Paper 54

Date: September 12, 2016

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PRAXAIR DISTRIBUTION, INC., Petitioner,

v.

INO THERAPEUTICS LLC, Patent Owner.

Case IPR2015-00884 Patent 8,291,904 B2

Before KEN B. BARRETT, MICHAEL J. FITZPATRICK, and SCOTT A. DANIELS, *Administrative Patent Judges*.

FITZPATRICK, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 318(a)



I. INTRODUCTION

Petitioner, Praxair Distribution, Inc., filed a Petition to institute an *inter partes* review of claims 1–16 of U.S. Patent No. 8,291,904 B2 (Ex. 1001, "the '904 patent") pursuant to 35 U.S.C. § 311(a). Paper 1 ("Pet."). Patent Owner, INO Therapeutics LLC, filed a Preliminary Response pursuant to 35 U.S.C. § 313. Paper 9 ("Prelim. Resp."). In a September 22, 2015, Decision, we granted the Petition, instituting trial on all claims on the following grounds:

claims 1–8 and 11–16 as obvious over Bathe (Ex. 1005)¹, Peters (Ex. 1004)², Paoli (Ex. 1006)³, and IR Standard (Ex. 1007)⁴; claims 3 and 4 as obvious over Bathe, Peters, Paoli, IR Standard, and Lebel (Ex. 1008)⁵; and claims 9 and 10 as obvious over Bathe, Peters, Paoli,

IR Standard, and Durkan (Ex. 1010).⁶

Paper 14 ("Inst. Dec.").

After institution, Patent Owner filed a Patent Owner Response (Paper 30, "PO Resp.") to which Petitioner filed a Reply (Paper 40, "Pet. Reply").

⁶ U.S. Patent No. 4,462,398, issued July 31, 1984.



2

¹ U.S. Patent No. 5,558,083, issued Sept. 24, 1996.

² U.S. Patent No. 7,114,510 B2, issued Oct. 3, 2006.

³ French Patent Application Publication No. 2,917,804, published Dec. 26, 2008.

⁴ ISO/IEEE 11073-30300, "Health informatics -- Point-of-care medical device communication -- Part 30300: Transport profile -- Infrared wireless," ISO, IEEE, (Dec. 15, 2004).

⁵ U.S. Patent No. 6,811,533 B2, issued Nov. 2, 2004.

Also, Patent Owner filed a Motion to Exclude. *See* Paper 44; *see also* Paper 48 (Petitioner's Opposition); Paper 49 (Patent Owner's Reply).

A hearing for oral arguments was held on May 16, 2016, and a transcript of the hearing is included in the record. Paper 53.

As discussed below, Petitioner has not shown by a preponderance of the evidence that any of the challenged claims is unpatentable.

A. The '904 Patent

The '904 patent relates to the administration of a therapy gas, such as nitric oxide (NO), to a patient. Ex. 1001, 1:14–16. In a background section, the '904 patent states that there was a need "to ensure that patient information contained within [a] computerized system matches the gas that is to be delivered" to the patient and "also a need for such an integrated device that does not rely on repeated manual set-ups or connections and which can also track individual patient usage accurately and simply." *Id.* at 1:40–45.

The '904 patent describes a gas delivery system comprising a valve assembly having a valve and circuit in communication with a control module to control administration of the therapy gas to a patient. *Id.* at 5:59–6:4. Administration of the therapy gas to the patient is controlled by controlling delivery of the gas from the gas source (i.e., a cylinder to which the valve assembly is mounted) to a medical device for introducing gas to a patient (e.g., a ventilator, nasal cannula, endotracheal tube, or face mask). *Id.*

Figures 2 and 3 are reproduced below.



FIG. 2

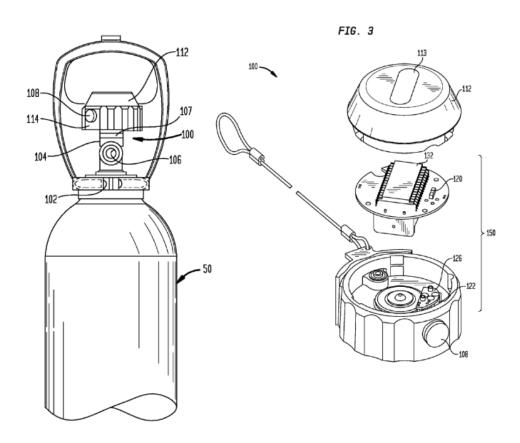


Figure 2 shows valve assembly 100 attached to gas source (cylinder) 50 via attachment portion 102. Ex. 1001, 6:26–29. The valve assembly includes inlet 104, outlet 106, valve 107, data input 108, and actuator 114 with cap 112 mounted thereto, as well as a circuit that is not shown in Figure 2. *Id.* at 6:26–37. Figure 3 shows the assembly valve partially disassembled, thus revealing circuit 150 within the actuator. *Id.* at 6:30–35.

Figure 4 is reproduced below.

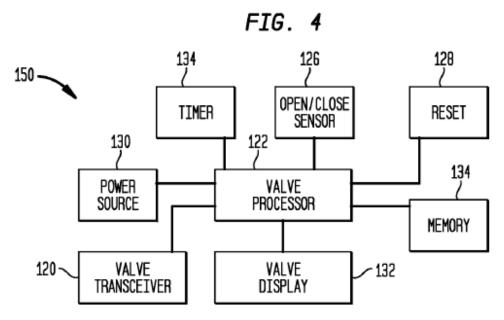


Figure 4 shows a block diagram of circuit 150 having valve processor 122, valve memory 134, valve transceiver 120, valve display 132, reset 128, power source 130, timer 124,⁷ and open/close sensor 126. Ex. 1001, 6:41–54. Gas data, such as gas composition and concentration, can be input to memory 134 in various ways such as programmed by the gas supplier or scanned from a bar code on the gas source. *Id.* at 7:5–21. The valve assembly is configured to communicate with the control module via wireless optical line-of-sight transmission between the valve transceiver and a CPU transceiver of the control module. *Id.* at 8:41–48.

⁷ Figure 4 mislabels the timer as 134. It should be labelled 124. Ex. 1001, 6:45.



5

DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

