

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIQUIDIA TECHNOLOGIES, INC.,
Petitioner

v.

UNITED THERAPEUTICS CORPORATION,
Patent Owner

Case No. IPR2021-00406
U.S. Patent No. 10,716,793

PETITIONER'S UPDATED EXHIBIT LIST

Exhibit No.	Description of Document
1001	U.S. Patent No. 10,716,793 B2 to Olschewski, et al. (“’793 patent”)
1002	Declaration of Dr. Nicholas Hill (“Hill Decl.”)
1003	<i>Curriculum Vitae</i> of Dr. Nicholas Hill
1004	Declaration of Dr. Igor Gonda (“Gonda Decl.”)
1005	<i>Curriculum Vitae</i> of Dr. Igor Gonda
1006	U.S. Patent No. 6,521,212 B1 to Cloutier, et al. (“’212 patent”)
1007	Voswinckel, R., et al., Abstract 218: “Inhaled treprostinil is a potent pulmonary vasodilator in severe pulmonary hypertension,” <i>European Heart Journal</i> 25:22 (2004) (“Voswinckel JESC”)
1008	Robert Voswinckel, Beate Enke, Andre Kreckel, Frank Reichenberger, Stefanie Krick, Henning Gall, Tobias Gessier, Thomas Schmehl, Markus G. Kohstall, Friedrich Grimminger, Hossein A. Ghofrani, Werner Seeger, and Horst Olschewski, Abstract 1414: “Inhaled Treprostinil Sodium (TRE) For the Treatment of Pulmonary Hypertension,” Abstracts from the 2004 Scientific Sessions of the American Heart Association, <i>Circulation</i> , 110(17 Suppl.):III-295 (October 26, 2004) (“Voswinckel JAHA”)
1009	Robert Voswinckel, Hossein A. Ghofrani, Friedrich Grimminger, and Werner Seeger, “Clinical Observations” on “Inhaled Treprostinil for Treatment of Chronic Pulmonary Arterial Hypertension,” “Letters” Section of the <i>Annals of Internal Medicine</i> , 144(2):149-50 (January 2006) (“Voswinckel 2006”)
1010	Hossein Ardeschir Ghofrani, Robert Voswinckel, et al., Neue Therapieoptionen in der Behandlung der pulmonalarteriellen Hypertonie, 30(4) HERZ, 30(4):296–302 (June 2005) (“Ghofrani”) (Foreign article and English translation attached)
1011	First Amended Complaint filed in <i>United Therapeutics Corporation v. Liquidia Technologies, Inc.</i> , Case No. 1:20-cv-00755-RGA (D. Del.)

Exhibit No.	Description of Document
1012	United Therapeutics Corporation's Answer to Defendant Liquidia Technologies, Inc.'s Counterclaims filed in <i>United Therapeutics Corporation v. Liquidia Technologies, Inc.</i> , Case No. 1:20-cv-00755-RGA (D. Del.)
1013	United Therapeutics Corporation's Opening Brief in Support of its Motion to Dismiss Defendant's Counterclaim filed in <i>United Therapeutics Corporation v. Liquidia Technologies, Inc.</i> , Case No. 1:20-cv-00755-RGA (D. Del.)
1014	Memorandum Order denying United Therapeutics Corporation's Motion to Dismiss Defendants Counterclaim filed in <i>United Therapeutics Corporation v. Liquidia Technologies, Inc.</i> , Case No. 1:20-cv-00755-RGA (D. Del.)
1015	10,716,793 Patent Prosecution History
1016	10,376,525 Patent Prosecution History (excerpted)
1017	9,339,507 Patent Prosecution History (excerpted)
1018	Remodulin® 2004 Label
1019	Stein, S.W., et al., "The History of Therapeutic Aerosols: A Chronological Review," <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 30(1):20-41 (2017) ("Stein")
1020	Clark, A.R., "Medical Aerosol Inhalers: Past, Present, and Future," <i>Aerosol Science and Technology</i> , 22:374-91 (1995) ("Clark")
1021	Ruan, C.-H., et al., "Prostacyclin Therapy for Pulmonary Arterial Hypertension," <i>Texas Heart Institute Journal</i> , 37(4):391-99 (2010) ("Ruan")
1022	Walmrath, D., et al., "Direct Comparison of Inhaled Nitric Oxide and Aerosolized Prostacyclin in Acute Respiratory Distress Syndrome," <i>American Journal of Respiratory Critical Care Medicine</i> , 153:991-96 (1996) ("Walmrath 1996")

Exhibit No.	Description of Document
1023	Olschewski, H., et al., "Inhaled Prostacyclin and Iloprost in Severe Pulmonary Hypertension Secondary to Lung Fibrosis," <i>American Journal of Respiratory Critical Care Medicine</i> , 160:600-07 (1999) ("Olschewski 1999")
1024	Haché, M., et al., "Inhaled epoprostenol (prostacyclin) and pulmonary hypertension before cardiac surgery," <i>Journal of Thoracic and Cardiovascular Surgery</i> , 125:642-49 (2003) ("Hache")
1025	De Wet, C.J., et al., "Inhaled prostacyclin is safe, effective, and affordable in patients with pulmonary hypertension, right heart dysfunction, and refractory hypoxemia after cardiothoracic surgery," <i>Journal of Thoracic and Cardiovascular Surgery</i> , 127:1058-67 (2004) ("De Wet")
1026	Denver, J. and Dyche, T., "The Adaptive Aerosol Delivery (AAD) Technology: Past, Present, and Future," <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 23(1 suppl):S-1-S10 (2010) ("Denver and Dyche")
1027	U.S. Patent No. 6,242,482 B1 to Shorr, et al. ("Shorr")
1028	U.S. Patent Application Publication No. US 2004/0265238 A1 to Chaudry ("Chaudry")
1029	Ventavis® Label 2004
1030	Newman, S.P., "Aerosols", Chapter from <i>Encyclopedia of Respiratory Medicine</i> pp. 58-64 (2006) ("Newman")
1031	Geller, D.E., "Comparing Clinical Features of the Nebulizer, Metered-Dose Inhaler, and Dry Powder Inhaler," <i>Respiratory Care</i> , 50(10):1313-21 (2005) ("Geller 2005")
1032	Bender, B., et al., "Nonadherence in asthmatic patients: is there a solution to the problem?" <i>Annals of Allergy, Asthma & Immunology</i> , 79:177-86 (1997) ("Bender 1997")
1033	Rau, J.L., "Determinants of Patient Adherence to an Aerosol Regimen," <i>Respiratory Care</i> 50(10):1346-56 (2005) ("Rau 2005")

Exhibit No.	Description of Document
1034	Geller, D., et al., “Bolus Inhalation of rhDNase with the AERx System in Subjects with Cystic Fibrosis,” <i>Journal of Aerosol Medicine</i> , 16(2):175-82 (2003) (“Geller 2003”)
1035	Chattaraj, S.C., “Treprostinil sodium Pharmacia,” <i>Current Opinion in Investigational Drugs</i> , 3(4):582-86 (Apr. 2002), available at https://pubmed.ncbi.nlm.nih.gov/12090728/ (“Chattaraj”)
1036	Declaration of Sylvia Hall-Ellis, Ph.D. (“Hall-Ellis Decl.”)
1037	English translation of OptiNeb® User Manual 2005
1038	Atkins, P.J., “Dry Powder Inhalers: An Overview,” <i>Respiratory Care</i> , 50(10):1304-12 (2005) (“Atkins”)
1039	Frijlink, H.W. and De Boer, A.H., “Dry powder inhalers for pulmonary drug delivery,” <i>Expert Opinion on Drug Delivery</i> , 1(1):67-86 (2004) (“Frijlink and De Boer”)
1040	Chew N. and Chan H.-K., “Pharmaceutical Dry Powder Aerosol Delivery,” <i>KONA</i> , No. 19, pp. 46-56 (2001) (Chew and Chan)
1041	<i>Reserved</i>
1042	January 27, 2020 Press Release, “Liquidia Submits New Drug Application for LIQ861 (Treprostinil) Inhalation Powder to U.S. Food And Drug Administration for the Treatment of Pulmonary Arterial Hypertension (PAH),” available at https://investors.liquidia.com/news-releases/news-release-details/liquidia-submits-new-drug-application-liq861-treprostinil
1043	2009 Tyvaso® Label, available at https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/022387s015lbl.pdf
1044	9,358,240 Patent Prosecution History (excerpted)
1045	<i>Reserved</i>
1046	U.S. Patent No. 9,358,240 to Olschewski, et al. (“240 Patent”)

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.