UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMNEAL PHARMACEUTICALS, LLC, Petitioner

v.

HOSPIRA, INC., Patent Owner

Inter Partes Review No. IPR2016-01578 Patent 8,338,470

PATENT OWNER PRELIMINARY RESPONSE

PURSUANT TO 37 C.F.R. § 42.107

DOCKET A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

LIST OF EXHIBITS

Exhibit	Description
1002	Declaration of Dr. James Cain.
1003	Declaration of Dr. Alpaslan Yaman.
1006	U.S. Patent No. 6,716,867 ("the '867 Patent").
1007	2010 Precedex [®] Label ("the 2010 Label").
1013	FDA Memorandum by Cynthia G. McCormick, M.D., dated November
	30, 1999 ("the McCormick FDA Memorandum").
1015	Giorgi et al., International Journal for Quality in Health Care, Vol. 22, No. 3, 170-178 (2010) ("Giorgi").
1016	Eichhorn, The Official Journal of the Anesthesia Patient Safety
	Foundation, Spring 2010 ("Eichhorn").
1017	Palmgren, European Journal of Pharmaceutics and Biopharmaceutics, June 29, 2006 ("Palmgren").
1018	Lavoisier Documents; Lavoisier Sodium Chloride Product Sheet, June
	2009 ("Lavoisier").
1019	FDA Memorandum by Bob A. Rappaport, M.D., dated November 5,
1005	1999 ("the Rappaport FDA Memorandum").
1025	Packaging Drugs and Pharmaceuticals, Wilmer A. Jenkins and Kenton R. Osborn, p. 259, 1993.
1026	"Pharmaceutical dosage forms, parenteral medications" edited by
	Kenneth E. Avis, et al. 2nd Edition, p. 161, 1992.
1027	"Sterile Pharmaceutical Packaging: Compatibility and Stability" Y. John
	Wang and Yie W. Chien, p. 16, 1984.
1028	Paula Youngberg Webb, et al. "The Keys to RTU Parenterals,"
	Pharmaceutical Formulation & Quality, Vol. 11, No. 5, p. 40, September
	2009.
1033	Liu, U.S. 6,310,094.
1034	Linden, P., et al., Ready-to-use injection preparations versus
	conventional reconstituted admixtures: economic evaluation in a real-
1025	life setting, PharmacoEconomics, Vol. 20, No. 8, 529-536 (2002).
1035	Cain, TraumaCare, July 2007, p. 5.
1039	G. DiSilvio, M. Jacoby, D. Weiner, A. Broussard, P. Callahan, and J.
	Cain, "Intranasal Dexmedetomidine & Midazolam: A Novel Sedation
	Technique for Infant PFT," Society for Pediatric Anesthesia, Phoenix,
1044	Arizona (March 2015).
1044	"Injectable medicines," WHO Collaborating Centre for Pharmaceutical
	Pricing and Reimbursement Policies,

	http://whocc.goeg.at/Glossary/PreferredTerms.
1049	Office Action Response, mailed Sept. 17, 2012, U.S. Application No.
1019	13/541,524.
1057	Declaration of Huailiang Wu, U.S. Application No. 13/541,524 ("the
	Wu Declaration").
2001	U.S. Patent No. 8,242,158 ("the '158 Patent").
2002	U.S. Patent No. 8,338,470 ("the '470 Patent").
2003	U.S. Patent No. 8,455,527 ("the '527 Patent").
2004	U.S. Patent No. 8,648,106 ("the '106 Patent").
2005	Declaration of Dr. Robert Linhardt ("the Linhardt Declaration").
2006	Declaration of Dr. Michael Ramsay ("the Ramsay Declaration").
2007	Accelerated Examination Support Document, U.S. Patent Application
	Serial No. 13/541,524.
2008	"Guidance for Industry: Drug Stability Guidelines," FDA Center for
	Veterinary Medicine, p. 26, Dec. 2008.
2009	"Guidance for Industry: Q1A (R2) Stability Testing of New Drug
	Substances and Products," FDA Center for Drug Evaluation and
	Research, p. 10, Nov. 2003.
2010	C.E. Blogg, M.A.E. Ramsay, and J.D. Jarvis, "Infection Hazard from
	Syringes," Br. J. Anaesth., 46, pp. 260-262 (1974).
2011	Speaker T.J. et al., "A Study of the Interaction of Selected Drugs and
	Plastic Syringes," PDA J Pharm Sci and Tech, 45:212-217 (1991).
2012	Kaur, M. et al., "Current role of dexmedetomidine in clinical anesthesia
	and intensive care," Anesth Essays Res. 2011 Jul-Dec., 5(2): 128-133.
2013	Ecoflac® Plus Brochure, B Braun.
2014	P. Donyai and G. Sewell, "Physical and chemical stability of paclitaxel
	infusions in different container types," J. Oncol. Pharm. Practice, 12, pp.
	211-222 (2006).
2015	Anes, J. et al., "Use of Plastics for Parenteral Packaging,"
	Pharmaceutical Dosage Forms: Parenteral Medications Volume 1, 2d
	Ed. (1992).
2016	Webb, P. et al., "Ensure Safety, Efficacy of Ready-to-Use IV Drug
	Products," PFQ Vol. 11, No. 6, Oct./Nov. 2009.
2017	"Guidance for Industry: Container Closure Systems for Packaging
	Human Drugs and Biologics," FDA Center for Drug Evaluation and
	Research, pp. 7-10, May 1999.
2018	Dahlstrom, M. et al., "Impact of polymer surface affinity of novel
	antifouling agents," Biotechnol Bioeng. 2004 Apr 5;86(1):1-8.
2019	Kambia, N.K. et al., "Compatibility of nitroglycerin, diazepam and

	chlorpromazine with a new multilayer material for infusion containers,"
	Journal of Pharmaceutical and Biomedical Analysis, 37: 259–264(2005).
2020	Martens, H. et al., "Sorption of various drugs in polyvinyl chloride, glass, and polyethylene-lined infusion containers," Am. J. Hospital Pharmacy, 47:2, pg. 369-373 (1990).
2021	T. Casey, "Hospira Slices into Plastic Medical Waste with New IV Bags," Clean Technica, Dec. 4, 2009, available at http://cleantechnica.com/2009/12/04/hospira-slices-into-plastic-medical- waste-with-new-iv-bags/.
2022	Yuen et al., "A Comparison of Intranasal Dexmedetomidine and Oral Midazolam for Premedication in Pediatric Anesthesia: A Double- Blinded Randomized Controlled Trial," Anesthesia & Analgesia 106(6):1715-1721 (June 2008).
2023	"Centralized Intravenous Additive Services (CIVAS): The state of the art in 2010," Annales Pharmaceutiques Francaises (2011) 69:30-37.
2024	Label for 0.9% w/v Sodium Chloride Intravenous Infusion BP, B. Braun Melsungen AG, Dec. 2010, available at https://www.old.health.gov.il/units/pharmacy/trufot/alonim/Sodium_Chl oride 0-9 DR 1319972870952.pdf.
2025	Ketalar TM Label (ketamine hydrochloride injection), Mar. 2012, p. 4, available at http://www.accessdata.fda.gov/drugsatfda_docs/label/2012/016812s0391 bl.pdf.
2026	Alkeran TM Label, June 2007, available at http://www.accessdata.fda.gov/drugsatfda_docs/label/2011/020207s017l bl.pdf.
2027	Desmaris, R. et al., "Stability of Melphalan in 0.9% Sodium Chloride Solutions Prepared in Polyvinyl Chloride Bags for Intravenous Injection," Drugs R. D., 14(3): 253-259, Jul. 2015.

TABLE OF CONTENTS

I.	INTI	RODUCTION1
II.	OVE	ERVIEW OF THE '470 PATENT
III.	SUM	IMARY OF DOCUMENTS CITED IN PETITION4
	A.	2010 Precedex [®] Label (the "2010 Label") (Ex. 1007)4
	B.	Palmgren (Ex. 1017)
	C.	U.S. Patent No. 6,716,867 ("the '867 Patent") (Ex. 1006)6
	D.	Giorgi (Ex. 1015)6
	E.	Eichhorn (Ex. 1016)
	F.	The Lavoisier Documents ("Lavoisier") (Ex. 1018)7
IV.	THE	LEVEL OF ORDINARY SKILL IN THE ART
V.	CLA	IM CONSTRUCTION
	A.	Legal Standard
	B.	Ready to Use9
	C.	Dexmedetomidine
VI.		ITIONER HAS NOT SHOWN A REASONABLE LIKELIHOOD
		AT AT LEAST ONE CLAIM OF THE '470 PATENT IS PATENTABLE
	A.	Legal Standard for Obviousness13
	B.	Ground 1: The Petition Fails to Demonstrate that the Claims Are Unpatentable over the 2010 Label in View of Palmgren15
		1. The 2010 Label and Palmgren Do Not Disclose or Suggest All Claim Elements
		2. There Was No Motivation to Combine Palmgren with the 2010 Label

DOCKET A L A R M



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.