#### UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARGENTUM PHARMACEUTICALS LLC
Petitioner
v.

ALCON RESEARCH, LTD Patent Owner

U.S. PATENT NO. 8,791,154

Inter Partes Review No. 2016-00544

DECLARATION OF LEONARD BIELORY, MD

000001

**ARGENTUM PHARM. 1003** 



### **TABLE OF CONTENTS**

I.	Introduction		3
II.	Background and Qualifications		4
III.	Person of Ordinary Skill in the Art		7
IV.	The Technology Claimed in the '154 Patent		10
V.	Claim Construction		12
V.	State of the Art		13
VI.	Summary of My Conclusions.		28
	A.	Aqueous ophthalmic solutions containing higher concentrations of olopatadine were known in the art	29
	B.	Even at high concentrations, olopatadine did not exhibit the biphasic effect commonly known to be exhibited by antihistamines.	34
	C.	Olopatadine's efficacy in treating both early and late phase ocular allergic conjunctivitis symptoms would not have been surprising	35
	D.	Ground 1: Obviousness Based On Bhowmick In View Of Yanni And Castillo	38
	E.	Ground 2: Obviousness Based On Schneider In View Of Hayakawa, Bhowmick And Castillo	40



I, Leonard Bielory, MD., hereby declare as follows.

#### I. Introduction

- 1. I have been retained as an expert witness on behalf of ARGENTUM PHARMACEUTICALS, LLC, ("ARGENTUM") for the above-captioned *inter* partes review (IPR). I am being compensated for my time by the hour in preparing this declaration, but my compensation is not tied to the outcome of this matter.
- 2. I understand that this Declaration accompanies a petition for IPR involving U.S. Patent No. 8,791,154 ("the '154 patent"), Ex. 1001, which resulted from U.S. Patent Application No. 13/475,607 ("the '607 application"), filed May 18, 2012. I also understand that the '154 patent claims priority to U.S. Provisional Patent Application No. 61/548,957, filed Oct 19, 2011 and U.S. Provisional Patent Application No. 61/487,789, filed May 19,2011.
- 3. The '154 patent names Daniel A. Gamache, Laman Alani, Malay Ghosh, Francisco Javier Galan, Núria Carreras Perdiguer, and Onkar N. Singh as the inventors. The '154 patent issued on June 29, 2014 from the '607 application. I understand that, according to the United States Patent and Trademark Office ("USPTO") records, the '154 patent is currently assigned to Alcon Research, Ltd. ("Alcon".)



In preparing this Declaration, I have reviewed the '154 patent, the 4. granted claims (1-27), and each of the documents cited herein, in light of general knowledge in the art. In formulating my opinions, I have relied upon my experience, education, and knowledge in the relevant art. In formulating my opinions, I have also considered the viewpoint of a person of ordinary skill in the art ("POSA") (i.e., a person of ordinary skill in the art of ophthalmic drug formulations and treatment). Throughout this declaration, in rendering my opinion, I have considered what the viewpoint of a POSA would have been prior to May 19, 2011, the filing date of U.S. Provisional Patent Application No. 61/487,789, to which the challenged '154 patent claims priority. In the event that the priority claim to the '789 patent is deemed invalid, I have also considered what the viewpoint of a POSA would have been prior to October 11, 2011, the filing date of U.S. Provisional Patent Application No. 61/548,957, to which the challenged '154 patent also claims priority.

## II. Background and Qualifications

5. I am an expert in the field of Allergy and Immunology. I am currently a Professor at Rutgers University, Center for Environmental Prediction, and an affiliate Member, NIEHS Center for Environmental Health Sciences at the Environmental and Occupational Health Sciences Institute, Rutgers University and



Robert Wood Johnson Medical School, Piscataway, New Jersey, as well as Professor of Medicine, Thomas Jefferson University. I am also currently the Chair, Joint Council of Allergy and Immunology – Joint Task Force - Practice Parameters of Allergic Eye Disease – Diagnosis and Management. Additionally, I have private practice as an allergist at Springfield, New Jersey.

I received a Bachelor's Degree in Fundamental Science from Lehigh 6. University in 1976. I received a Doctor of Medicine (M.D.) degree from -University of Medicine and Dentistry of New Jersey (UMDNJ)-New Jersey Medical School (now Rutgers University –New Jersey Medical School), Newark, N.J. I completed postdoctoral training in Medicine at the University of Maryland Hospitals, Baltimore, Maryland, and in Allergy and Immunology and Hematology at the National Institutes of Health, National Heart, Lung and Blood Institute, Bethesda, Maryland. Subsequent to my education, I joined UMDNJ – NJ Medical School in 1985 as an Assistant Professor of Medicine and Pediatrics. I also worked as Associate Professor of Medicine, Pediatrics and Ophthalmology before being promoted to Professor of Medicine, Pediatrics, Ophthalmology and Visual Sciences. I was also appointed to the positions of Director of the Division of Allergy and Immunology, Department of Medicine, Co-Director Immuno-Ophthalmology Service, Department of Ophthalmology, and Director, Division of Allergy, Immunology & Rheumatology, Department of Medicine at UMDNJ – NJ



# 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.

