UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PAR PHARMACEUTICAL, INC.,

Petitioner

v.

HORIZON THERAPEUTICS, LLC, Patent Owner

> Case IPR2017-01767 Patent 9,254,278

DECLARATION OF DR. GREGORY M. ENNS



Harizan Exhibit 2006

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

TABLE OF CONTENTS

I.	INTRODUCTION				
II.	QUALIFICATIONS				
	A. Education				
	B.	Professional Experience			
	C.	Publications and Presentations			
	D.	Honors and Awards			
	E.	Professional Organizations and Service Activities7			
III.	LEGAL PRINCIPLES				
IV.	SUMMARY OF OPINIONS				
V.	PERSON OF ORDINARY SKILL IN THE ART11				
VI.	TECHNOLOGY BACKGROUND				
VII.	OVERVIEW OF THE '278 PATENT				
	A.	The Claims of the '278 Patent			
VIII.	CLAIM CONSTRUCTION				
	A.	"upper limit of normal"			
IX.	THE PRIOR ART DOES NOT DISCLOSE OR SUGGEST THE SUBJECT MATTER OF CLAIMS 1-15				
	A. The Prior Art Does Not Disclose Increasing a Dosage of Glyceryl Tri-[4- phenyl-butyrate] in a Patient with a Fasting Plasma Ammonia Level Between Half the ULN and the ULN				
	B. The Prior Art Provides No Reason to Adjust the Treatment Regimen of a Subject with a Fasting Plasma Ammonia Level in the Normal Range				
		1. The Prior Art as a Whole Provided no Reason to Increase the Dosage When Plasma Ammonia Levels were Already in the Normal or Near-Normal Range			
		 The Reported Variability in Plasma Ammonia Levels Discouraged Reliance on Normal Plasma Ammonia Levels in Making Dosage Adjustment Decisions			

	3. The Prior Art Did Not Suggest Reliance on Fasting Plasma Ammonia Measurements for Dosage Adjustments	55
C.	There Was No Reasonable Expectation that Administering an Increased Dosage to a Patient with a Plasma Ammonia Level Already in the Normal Range Would Confer a Treatment Benefit	59
D.	The Prior Art Did Not Disclose or Suggest Targeting a Plasma Ammonia Level at or Below Half the ULN	61
CON	CLUSION	69

Х.

I, Dr. Gregory M. Enns, hereby declare as follows:

I. INTRODUCTION

 I, Dr. Gregory M. Enns, have been retained by Green, Griffith & Borg-Breen LLP on behalf of Horizon Therapeutics, LLC, as an independent expert in the field of clinical biochemical genetics. My curriculum vitae establishes my qualifications in this area. (Ex. 2007.) I am being compensated for the time I spend on this matter, but no part of my compensation depends directly or indirectly on the outcome of this proceeding or any related proceeding.

2. I understand that this proceeding involves U.S. Patent No. 9,254,278 ("the '278 patent"). (Ex. 1001.) I understand that the application for the '278 patent was filed on August 3, 2015, as a continuation of U.S. Patent Application No. 13/775,000, filed February 22, 2013, now U.S. Patent No. 9,095,559 ("the '559 Patent"). The '278 patent is also the subject of currently pending IPR No. 2017-01159, filed by Lupin Ltd. and Lupin Pharmaceuticals Inc. (collectively, "Lupin"). I have submitted an expert declaration on behalf of Patent Owner, Horizon Therapeutics, LLC in IPR2017-01159. I have also submitted expert declarations on behalf of Patent Owner Horizon Therapeutics, LLC in the currently pending IPR proceedings also filed by Lupin concerning related U.S. Patent No. 9,326,966 ("the '966 patent"), Lupin Ltd. et al. v. Horizon Therapeutics, LLC, IPR2017-01160, and the '559 patent, Lupin Ltd. et al. v. Horizon Therapeutics, Inc., IPR2016-00829. Finally, I have also submitted expert declarations on behalf of Patent Owner Horizon Therapeutics, LLC in the currently pending IPR proceedings filed by instant Petitioner Par Pharmaceutical, Inc. ("Par") concerning the '966 patent, Par Pharmaceutical, Inc. et al. v. Horizon Therapeutics, LLC, IPR2017-01769, and the '559 patent, Par Pharmaceutical, Inc. et al. v. Horizon Therapeutics, LLC, IPR2017-01768.

3. I understand that the '278 patent issued on February 9, 2016, and that the '278 patent claims priority to Provisional Application No. 61/564,668 ("the '668 application"), filed on November 29, 2011, and Provisional Application No. 61/542,100, filed on September 30, 2011. (Ex. 1001.) I have therefore considered the state of the art and the prior art available as of September 30, 2011.

4. I understand that Petitioner has asserted that claims 1-15 of the '278 patent are unpatentable on the grounds listed in the table below:

Ground	Basis	References	Challenged '278 Patent Claims
1	§ 102	The '859 Publication	Independent Claim: 1 Dependent Claim: 2-3
2	§ 103	Fernandes in view of the '859 Publication and Lee or Lichter- Konecki, optionally in further view of Blau or Simell	Independent Claim: 1 Dependent Claims: 2-3
3	§ 103	Fernandes in view of the '859 Publication, optionally in further view of Blau, Simell and/or Lee	<u>Independent Claims</u> : 4, 8, 12 <u>Dependent Claims</u> : 6, 7, 10, 11, 14, 15
4	§ 103	Fernandes in view of the '859 Publication and Lee or Lichter- Konecki, optionally in further view of Blau or Simell	Dependent Claims: 5, 9, 13

5. In preparing this declaration, I have considered the '278 patent and its prosecution history, the Petition for *Inter Partes* Review of No. U.S. Patent 9,254,278, the Declaration of Dr. Sondheimer (Ex. 1002) ("Sondheimer"), the prior art and references identified in the Petition and the Sondheimer Declaration, my knowledge and expertise in the art, and any additional materials cited herein.

Find authenticated court documents without watermarks at docketalarm.com.

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.