UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FLATWING PHARMACEUTICALS, LLC, Petitioner,

v.

ANACOR PHAMACEUTICALS, INC., Patent Owner

> Case No. IPR2018-00168 Patent No. 9,549,938

DECLARATION OF PAUL J. REIDER, PH.D. IN SUPPORT OF PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

I.	INTF	RODUCTION
II.	ACA	DEMIC AND PROFESSIONAL QUALIFICATIONS2
III.	THE	'938 PATENT
IV.	TEC	HNICAL BACKGROUND7
	A.	Boron Chemistry7
	B.	Boron Compounds as Pharmaceutical Drugs12
	C.	Molecular Structure of Keratin14
V.	THE	CITED REFERENCES17
	A.	Austin17
	B.	Brehove
	C.	Freeman
	D.	Samour
VI.	RESI	PONSE TO PETITIONER'S GROUNDS
	A.	A POSA in 2005 Would Have Expected Tavaborole to Have High Keratin-Binding Affinity
		1. Boron-Containing Compounds Form Complexes with Electron-Rich Atomic Species and Functional Groups to Satisfy Boron's Electron Deficiency
		2. Keratin's Molecular Structure Presents an Electron-Rich "Gauntlet" for Boron-Containing Compounds26
	B.	Brehove's Dioxaborinane Compounds Undergo Hydrolysis and Do Not Penetrate the Nail Plate

Case No. IPR2018-00168 U.S. Patent No. 9,549,938

	C.	A POSA Would Not Have Arrived at the Claimed Amount of Tavaborole Through Routine Experimentation	29
VII.	CON	ICLUSION	33

I, Paul J. Reider, Ph.D., hereby state and declare as follows:

I. INTRODUCTION

1. I have been asked by Patent Owner Anacor Pharmaceuticals, Inc. ("Anacor") to offer my expert opinions regarding the petition for *inter partes* review of U.S. Patent No. 9,549,938 ("the '938 patent") filed by FlatWing Pharmaceuticals, LLC ("FlatWing"). This declaration contains my opinions related to the validity of claims 3, 5, and 6 of the '938 patent.

2. I am being compensated at my customary hourly rate, and my compensation is not dependent upon the outcome of, or the content of my testimony in, the present *inter partes* review proceeding or any litigation proceedings.

3. I have reviewed FlatWing's petition for *inter partes* review ("Pet.") of the '938 patent, including the declarations filed in support of the petition submitted by Dr. Stephen B. Kahl ("Kahl Decl.," Ex. 1003) and Dr. S. Narasimha Murthy ("Murthy Decl.," Ex. 1005). I have further reviewed the exhibits and articles cited in these documents, as well as the articles and documents cited in this declaration.

4. I have additionally reviewed the declaration of Dr. Majella E. Lane
("Lane Decl.," Ex. 2014) filed in support Anacor's response to FlatWing's petition.
I am also aware of knowledge generally available to and relied upon by persons of ordinary skill in the art ("POSA") at the time of the invention.

5. This declaration is based on information currently available to me. I reserve the right to continue my investigation and analysis, which may include a review of documents and information not yet provided. I further reserve the right to expand or otherwise modify my opinions and conclusions as my investigation and study continues, and to supplement my opinions and conclusions in response to any additional information that becomes available to me.

II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS

 I am a Lecturer at the rank of Professor of Chemistry at Princeton
 University. A copy of my curriculum vitae is attached as Exhibit 2044. My educational background and my professional experience are summarized below.

7. I obtained A.B. degrees in psychology and chemistry from the Washington Square College at New York University in 1972. I obtained my Ph.D. in organic chemistry from the University of Vermont in 1978. My Ph.D. thesis concerned the total synthesis of the natural product ibogamine.

8. After two years of post-doctoral work at Colorado State University from 1978–1980, I joined Merck Research Labs as a Senior Research Chemist in process research. For the next twenty-two years, I remained at Merck, eventually rising to the rank of Vice President. During that time, I participated in the discovery and development of more than a dozen FDA-approved drugs, including CAN-CIDAS[®], an intravenous antifungal medication.

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