

IPR2021-00406
U.S. Patent No. 10,716,793 B2

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIQUIDIA TECHNOLOGIES, Inc.,
Petitioner,

v.

UNITED THERAPEUTICS CORPORATION,
Patent Owner.

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

DECLARATION OF DR. JASON MCCONVILLE

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1. “wherein the therapeutically effective single event dose comprises from 15 micrograms to 90 micrograms of treprostinil or a pharmaceutically acceptable salt thereof”23

2. A Dose of 15-90 micrograms “delivered in 1 to 3 breaths”44

B. Ground 2: the '212 Patent and Voswinckel JESC47

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I. INTRODUCTION

A. Scope of Analysis

1. I have been retained by counsel for the Plaintiff, United Therapeutics Corporation (“UTC”) to provide expert opinions related to U.S. Patent No. 10,716,793 (“the ’793 patent”).

2. I understand that Liquidia (“Petitioner”) filed a Petition for Inter Partes Review (“IPR” or “Petition”) with the Patent Trial and Appeal Board (“PTAB” or “Board”), with the Petition asserting six Grounds of unpatentability:

Ground	'793 Patent Claims	Alleged Basis
1	1-8	Obviousness: '212 patent, Voswinckel JAHA, Voswinckel JESC
2	1-8	Obviousness: '212 patent and Voswinckel JESC
3	1	Anticipation: Ghofrani
4	1, 3, 8	Obviousness: Voswinckel JAHA and Ghofrani
5	1, 3	Anticipation: Voswinckel 2006
6	2, 4-8	Obviousness: Voswinckel 2006 and '212 patent

3. I understand from counsel that Ghofrani and Voswinckel 2006 are not prior art, which causes Grounds 3-6 to fail. Thus, I have been asked to provide opinions regarding Grounds 1-2, and the references cited therein, only.

B. Qualifications

4. My *curriculum vitae*, which is provided as EX2054, summarizes my professional experience. I provide below further details about my experience that may be pertinent to this matter.

5. I am an Associate Professor of Pharmaceutics at the University of New Mexico College of Pharmacy and an Adjunct Professor at the University of Bonn, in the Department of Pharmaceutical Technology, in Bonn, Germany.

6. I received my Bachelor of Science, with Honours, in Applied Chemistry from Coventry University, in Coventry, United Kingdom in 1994.

7. I was a Research Technician in Pharmaceutics at the Centre for Drug Formulation Studies (CDFS) at the University of Bath, in Bath, United Kingdom from 1994 to 1999. There, my main research project pertained to inhaled controlled-release drug delivery and was specifically related to extending the pharmacodynamic effect of a short acting β -2 agonist in the lung. In addition to this work, I gained experience in many aspects in inhalation therapy, including: particle size reduction for inhaled aerosols, dry powder inhaler devices, nebulization, and application of standardized aerosol testing methods for inhaled products.

8. I subsequently earned my Ph.D. in Pharmaceutics from the University of Strathclyde, in Glasgow, United Kingdom in 2002. My Ph.D. dissertation was titled "Pulsed-Release Drug Delivery and Development of the Time-Delayed

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