

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARGENTUM PHARMACEUTICALS LLC

Petitioner

v.

RESEARCH CORPORATION TECHNOLOGIES, INC.

Patent Owner

Patent No. RE38,551

Inter Partes Review Case No.: IPR2016-00204

Declaration of Dr. Binghe Wang

TABLE OF CONTENTS

I.	Introduction.....	1
A.	U.S. Patent No. RE 38,551.....	2
II.	My Background And Qualifications	6
III.	List Of Documents Considered In Formulating My Opinion	7
IV.	Person Of Ordinary Skill In The Art.....	10
A.	Overview of the Class of Compounds	11
V.	State Of The Prior Art	14
A.	Cortes 1985 (Ex. 1015)	14
B.	LeGall (1987) (Ex. 1008).....	15
C.	Kohn 1991 (Ex. 1012).....	17
D.	The '729 Patent (Ex. 1009)	19
E.	Kohn 1993 (Ex. 1017).....	21
F.	Choi (Ex. 1010)	23
G.	The '301 Patent (1995) (Ex. 1019)	24
H.	Silverman (1992) (Ex. 1013).....	27
VI.	Ground 1A: Claims 1 And 3-8 Are Anticipated By LeGall.....	28
A.	Basis of my Opinion with Respect to Anticipation.....	28
B.	Claims 1 and 3-8.....	28
VII.	Ground 1B: Claims 2 And 9-13 Are Obvious Over LeGall And The '729 Patent	31
A.	Basis of My Opinion with Respect to Obviousness.....	31
B.	Claims 2 and 9 Directed to Purified R-Enantiomers are Obvious	33
C.	Claim 10 to a “Therapeutic Composition” is Obvious over LeGall and '729 patent	35
D.	Claims 11-13 to Methods of Treatment are Obvious over LeGall and the '729 Patent.....	38
VIII.	Ground 2A: Claims 1-9 Are Obvious Over Choi And Kohn 1991	41

A.	Claim 1 is Obvious	41
1.	POSA had a reason to select compound 2d of Choi (compound 107d of LeGall) as a lead compound	41
2.	POSA had a reason to modify compound 2d by placing a “functionalized oxygen” (methoxy) two atoms removed from the α -carbon	44
3.	A POSA would have expected success in making the necessary modification using techniques known in the art	48
B.	Claims 2 and 9 Directed to Purified Enantiomers are Obvious	49
IX.	Ground 2B: Claims 10-13 Are Obvious Over Choi, Kohn 1991 And The ’729 Patent	50
A.	Claim 10 to a “Therapeutic Composition” is Obvious	50
B.	Claims 11-13 to Methods of Treatment are Obvious.....	51
X.	Ground 3A: Claims 1-9 Are Obvious Over Kohn 1991 And Silverman	52
A.	Claim 1 is Obvious	52
B.	Claims 2 and 9 Directed to Purified Enantiomers are Obvious	55
XI.	Ground 3B: Claims 10-13 Are Obvious Over Kohn 1991, Silverman And The ’729 Patent.....	56
A.	Claim 10 to a “Therapeutic Composition” is Obvious	56
B.	Claims 11-13 to Methods of Treatment Are Obvious.....	57
XII.	Ground 4A: Claims 1-9 Are Obvious Over Cortes and Kohn 1991	58
A.	Claim 1 is Obvious	58
1.	POSA had a reason to select the methyl compound of Cortes or Kohn 1991 as a lead compound.....	58
2.	POSA had a reason to modify the methyl substituent to a methoxymethyl.....	59
XIII.	Ground 4B: Claims 10-13 Are Obvious Over Cortes, Kohn 1991, And The ’729 Patent	62
A.	Claim 10 to a “Therapeutic Composition” is Obvious	62
B.	Claims 11-13 to Methods of Treatment are Obvious.....	63
XIV.	Absence of Secondary Considerations of Non-Obviousness	63
XV.	The Declaration Of Dr. Heathcock.....	68

XVI. Conclusion71

I, Binghe Wang, do declare as follows:

I. Introduction

1. I am over the age of eighteen (18) and otherwise competent to make this declaration.

2. I have been retained as an expert witness on behalf of Argentum Pharmaceuticals LLC for a *inter partes* review (IPR) for U.S. Patent No. RE 38,551 (Ex. 1001). I am being compensated for my time in connection with this IPR at my standard consulting rate, which is \$500 per hour. I understand that my declaration accompanies a petition for *inter partes* review involving the above-mentioned U.S. Patent.

3. I understand that the subject patent has been the subject of a previous IPR filed by other entities. I understand that the Patent Trial and Appeal Board denied that IPR petition for several reasons that are not implicated here. First, I understand that the former IPR petition argued that U.S. Patent No. 5,654,301 (Ex. 1020) anticipates the claims of U.S. Patent No. RE38,551 (Ex. 1001). I understand that anticipation requires an identical prior art disclosure of the claimed invention and, in the case of a prior art genus, then a POSA must be able to “immediately envisage” the claimed invention within that genus. Second, I understand that the public availability of the LeGall (Ex. 1008) thesis was in dispute in the prior IPR, and that the PTAB sided with the

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.