

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MYLAN PHARMACEUTICALS INC., CELLTRION, INC.,
and APOTEX INC.,
Petitioners

v.

REGENERON PHARMACEUTICALS, INC.
Patent Owner.

Case IPR2021-00880¹
Patent 9,669,069 B2

Case IPR2021-00881
Patent 9,254,338 B2

EXPERT DECLARATION OF LUCIAN V. DEL PRIORE, M.D., PH.D.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

¹ IPR2022-00257, IPR2022-00258, IPR2022-00298, and IPR2022-00301 have been joined with this proceeding.

Mylan v. Regeneron IPR2021-00881 U.S. Pat. 9,254,338 Exhibit 2048
--

TABLE OF CONTENTS

Page No.

Contents

I.	INTRODUCTION	1
II.	QUALIFICATIONS AND EXPERIENCE.....	1
III.	SUMMARY OF OPINIONS.....	4
IV.	THE PERSON OF ORDINARY SKILL IN THE ART	5
V.	LEGAL STANDARDS	6
	A. Burden of Proof.....	6
	B. Anticipation.....	6
VI.	THE '338 PATENT.....	7
VII.	THE '069 PATENT.....	9
VIII.	“A METHOD FOR TREATING AN ANGIOGENIC EYE DISORDER IN A PATIENT”	11
IX.	EYLEA®	11
X.	PRIOR ART REFERENCES	13
	A. Dixon (Ex. 1006).....	13
	B. Adis R&D Profile (Ex. 1007).....	15
	C. Regeneron (8-May-2008) (Ex. 1013).....	17
	D. NCT-795 and NCT-377 (Ex. 1014 and Ex. 1015).....	18
	E. Heier-2009 (Ex. 1020).....	19
	F. Regeneron (30-April-2009) (Ex. 1028).....	20
XI.	THE CHALLENGED CLAIMS ARE NOT ANTICIPATED	20
	A. The POSA Would Not Have Known That “VEGF Trap-Eye” Necessarily Has the Same Amino Acid Sequence as Aflibercept	20

1.	The POSA Would Not Have Concluded That Dixon’s “Molecular Structure” Necessarily Corresponds to the Same Amino Acid Sequence	21
2.	Regeneron Referred to “VEGF Trap-Eye” as an Ophthalmology Drug and “Aflibercept” as an Oncology Drug.....	25
3.	Dixon Refers to “Aflibercept” and “VEGF Trap-Eye” as Different Products for Different Uses.....	29
4.	The POSA Could Have Reasonably Concluded That “VEGF Trap-Eye” for Ophthalmology Was a Separate and Different Product than “Aflibercept” for Oncology	30
5.	The POSA Would Have Understood That VEGF-Trap-Eye Could Encompass a Genus of Protein Sequences.....	32
B.	Even If the POSA Knew the Amino Acid Sequence of VEGF Trap-Eye, S/He Would Not Necessarily Be Able to Obtain a Drug Product That Would Provide Treatment Using the Claimed Dosing Regimen.	35
C.	Administration of VEGF Trap-Eye (Eylea®) Using the Disclosed Dosing Regimen Will Not Result in an Effective Treatment for All Patients	42
1.	Even Assuming a Very Low Level of Efficacy, Administration of VEGF Trap-Eye (Eylea®) Using the Claimed Dosing Regimen Will Not Necessarily Result in an Effective Treatment for All Patients	43
2.	Using a High Level of Efficacy—(Non-Inferior to Standard-Of-Care), the Disclosed Q8 Dosing Regimen Will Not Result in a Effective Treatment for Some Patients.....	44

I, Dr. Lucian V. Del Priore, declare as follows:

I. INTRODUCTION

1. I have been retained by counsel for Regeneron Pharmaceuticals, Inc. (“Regeneron”) as a technical expert in connection with the above-captioned proceeding. I have been asked to provide my opinions and views on the materials I have reviewed in relation to the Petition for *Inter Partes* review of U.S. Patent No. 9,254,338 (the “’338 Patent”) (Ex. 1001),² U.S. Patent No. 9,669,069 (“the ’069 Patent”) (Ex. 1019) and, in particular, the state of the art as of the earliest filing date (“priority date”) of the ’338 and ’069 Patents and responses to the opinion and views of Petitioner’s declarant, Thomas A. Albini, M.D. I submit this declaration in support of Regeneron’s Patent Owner Responses (“PORs”).

2. I am being paid at my usual and customary rate for my work on this matter. I have no personal or financial stake in, or affiliation with, the petitioner, real-parties-in-interest, or the patent owner. My compensation is not dependent upon the outcome of, or my testimony in, the present proceeding.

II. QUALIFICATIONS AND EXPERIENCE

3. My qualifications as an expert in the field of ophthalmology are established by my *curriculum vitae*, which is attached as Ex. 2081, and the

² Unless otherwise noted all citations to exhibits refer to exhibits filed in IPR2021-00881.

experience and publications cited therein, which includes a list of all publications authored by me in the previous 10 years. I summarize my most pertinent qualifications below.

4. I am the Robert R. Young Professor of Ophthalmology and Visual Science at Yale University; Chair of the Department of Ophthalmology and Visual Science, Yale Eye Center; and Chief of Ophthalmology, Yale New Haven Hospital.

5. I received a B.S. in Physics from Cooper Union for the Advancement of Science and Art; a M.S. and Ph.D. in Physics from Cornell University; and a M.D. with Distinction in Research from The University of Rochester School of Medicine and Dentistry. I was also awarded an Honorary Master of Arts degree by Yale University in 2017.

6. After medical school, I completed my residency in ophthalmology, a glaucoma fellowship, and a vitreoretinal surgery fellowship at the Wilmer Eye Institute of the John Hopkins Hospital.

7. I have more than thirty years of experience treating patients in the field of ophthalmology and, in particular in treating patients with diseases of the retina including age-related macular degeneration, diabetic macular edema, diabetic retinopathy, central retinal vein occlusion, branch retinal vein occlusion, and corneal neovascularization.

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.