IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FAMY CARE LIMITED
Petitioner

v.

ALLERGAN, INC. Patent Owner

Patent No. 8,642,556 B2

Declaration of Peter Kador, Ph.D.



TABLE OF CONTENTS

I.	INTRODUCTION.	1
II.	QUALIFICATIONS	1
III.	SCOPE OF ENGAGEMENT.	5
IV.	SUMMARY OF OPINIONS	7
V.	THE '556 PATENT OVERVIEW.	18
A.	The '556 Patent Specification.	18
B.	The '556 Patent Claims.	19
1	1. Independent Claims	19
2	2. Dependent Claims Adding Composition Elements	21
3	3. Dependent Claims Adding "Reduction in Adverse Events" Elements	22
2	4. Dependent Claims Adding "Substantially No Detectable Concentration of CsA" Elements.	
C.	'556 Patent File History.	23
VI.	THE PERSON OF ORDINARY SKILL IN THE ART.	27
VII.	CLAIM CONSTRUCTION.	28
A.	"Buffer"	29
B.	"Substantially No Detectable Concentration Of The Cyclosporin A"	29
C.	"Effective Amount," "Therapeutically Effective," "Overall Efficacy" an "Therapeutic Effectiveness"	
D.	"Adverse Events" and "Side Effects"	32
E.	"Breaks Down"	33
VIII.	LEGAL STANDARDS.	34
A.	Anticipation – 35 U.S.C. § 102.	34
B.	Obviousness – 35 U.S.C. § 103	34
IX.	DISCLOSURES, KNOWLEDGE & INFORMATION AVAILABLE IN THE ART AS OF SEPTEMBER 15, 2003	38
A.	State of the Art Generally	38
]	1. CsA Was a Known Treatment for Dry Eye Disease	38
2	2. CsA-in-Castor Oil Emulsions Were Known In the Art.	42
В.	Ding '979	48



C.	Sall55
D.	Acheampong62
E.	Glonek64
X.	DETAILED ANALYSIS OF THE '556 PATENT CLAIMS CONCERNING ANTICIPATION AND OBVIOUSNESS
A.	Ding '979 Claim Chart67
В.	Ground 1: Ding '979 Discloses Every Limitation of '556 patent Claims 1-20
1	. Claims 1-10 and 12-1375
2	2. Claim 14
3	3. Claims 15-1796
4	Claims 11 and 18-2099
C.	Ground 2: '556 Patent Claims 1-20 Are Obvious In View Of Ding '979 and Sall
1	. Claims 1-10, and 12-13102
2	2. Claim 14
3	3. Claims 15-17
4	Claims 11 and 18-20
5	S. Reasonable Expectation of Success
D.	Ground 3: '556 Patent Claims 14 and 19 Are Obvious In View Of Ding '979, Sall and Glonek
E.	Ground 4: Claims 11, and 18-20 Are Unpatentable Under 35 U.S.C. § 103 in View of Ding '979, Sall, and Acheampong
F.	Ground 5: Claim 19 is Unpatentable Under 35 U.S.C. § 103 in View of Ding '979, Sall, Glonek and Acheampong
XI.	SECONDARY CONSIDERATIONS OF NONOBVIOUSNESS131
VII	CONCLUDING STATEMENTS 125



TABLE OF EXHIBITS

Exhibit	Description
1001	U.S. Patent No. 8,642,556 B2 ("the '556 patent)
1002	Intentionally Blank
1003	Declaration of Dr. Michael A. Lemp
1004	File history of U.S. Patent No. 8,642,556 to Acheampong et al., filed August 14, 2013 ("'556 patent FH")
1005	File history of U.S. Patent Application No. 10/927,857 to Acheampong et al., filed August 27, 2004 ("'857 application FH")
1006	U.S. Patent No. 5,474,979 to Ding et al., filed May 17, 1994 ("Ding '979")
1007	K. Sall et al., Two Multicenter, Randomized Studies of the Efficacy and Safety of Cyclosporine Ophthalmic Emulsion in Moderate to Severe Dry Eye Disease, 107 OPHTHALMOLOGY 631 (2000) ("Sall")
1008	A. Acheampong et al., Cyclosporine Distribution into the Conjunctiva, Cornea, Lacrimal Gland, and Systemic Blood Following Topical Dosing of Cyclosporine to Rabbit, Dog, and Human Eyes, in 2 LACRIMAL GLAND, TEAR FILM, & DRY EYE SYNDROMES 1001 (David A. Sullivan et al. eds., 1998) ("Acheampong")
1009	U.S. Patent No. 5,578,586 to Glonek et al., filed February 4, 1994 ("Glonek")
1010	U.S. Patent No. 5,981,607 to Ding et al., filed January 20, 1998 ("Ding '607")
1011	R. Kaswan, Intraocular Penetration of Topically Applied Cyclosporine, 20 Transpl. Proc. 650 (1988) ("Kaswan")
1012	K. Kunert et al., Analysis of Topical Cyclosporine Treatment of Patients with Dry Eye Syndrome, 118 ARCH OPHTHALMOL 1489 (2000) ("Kunert")



1013	PHYSICIANS' DESK REFERENCE FOR OPHTHALMOLOGY 13-18 (Medical Economics Co., 27th ed. 1999) ("Ophthalmic PDR")
1014	K. Turner et al., Interleukin-6 Levels in the Conjunctival Epithelium of Patients with Dry Eye Disease Treated with Cyclosporine Ophthalmic Emulsion, 19 CORNEA 492 (2000) ("Turner")
1015	D. Stevenson et al., Efficacy and Safety of Cyclosporin A Ophthalmic Emulsion in the Treatment of Moderate-to-Severe Dry Eye Disease, 107 OPHTHALMOLOGY 967 (2000) ("Stevenson")
1016	REMINGTON'S 20 TH EDITION: THE SCIENCE AND PRACTICE OF PHARMACY (A. Gennaro ed. 2003) ("Remington")
1017	E. Goto et al., Low-Concentration Homogenized Castor Oil Eye Drops for Noninflamed Obstructive Meibomian Gland Dysfunction, 109 OPHTHALMOLOGY 2030 (2002) ("Goto")
1018	A. Kanpolat et al., Penetration of Cyclosporin A into the Rabbit Cornea and Aqueous Humor after Topical Drop and Collagen Shield Administration, 20 CLAO J. 119 (1994) ("Kanpolat")
1019	C. Vieira et al., Effect of Ricinoleic Acid in Acute and Subchronic Experimental Models of Inflammation, 9 Mediators Inflammation 223 (2000) ("Vieira")
1020	R. Murphy, <i>The Once and Future Treatment of Dry Eye</i> , REVIEW OF OPTOMETRY ONLINE (Feb. 15, 2000) ("Murphy")
1021	D. Small et al., Blood Concentrations of Cyclosporin A During Long- Term Treatment with Cyclosporin A Ophthalmic Emulsions in Patients with Moderate to Severe Dry Eye Disease, 18 J. Ocular Pharmacology & Therapeutics 411 (2002) ("Small")
1022	STEDMAN'S MEDICAL DICTIONARY 944, 1300, 1548, 1634, 1821 (27th ed. 2000) ("Stedman's")
1023	Allergan, Inc.'s Complaint for Patent Infringement, <i>Allergan, Inc. v. Famy Care Ltd.</i> , No. 2:16-cv-401 (E.D. Tex. Apr. 12, 2016)



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.

