UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., Petitioner,

v.

COREPHOTONICS, LTD., Patent Owner.

Case No. IPR2020-00897 U.S. Patent No. 10,324,277

PATENT OWNER'S RESPONSE



TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	OVERVIEW OF THE '277 PATENT	2
A.	. Description of the '277 Patent	2
В.	. Multiple Element Lens Design	8
III.	LEVEL OF ORDINARY SKILL	2
IV.	CLAIM CONSTRUCTION	2
V.	OVERVIEW OF THE ASSERTED PRIOR ART 1	3
A.	. Ogino (Ex. 1005)	3
B.	Bareau (Ex. 1012)	21
VI.	PATENTABILITY OF CHALLENGED CLAIMS	23
A.	GROUND 1 – The Petition Fails to Demonstrate that Claims 1-3 and 5-8 are Unpatentable Over the Combination of Ogino Example 4 and Bareau	le
	a. Petitioner ignores the manufacturability of the lenses	31
	b. Petitioner's proposed assembly has overlapping lenses in the region of thoptical rays.	
	c. Results of the combination violate the teachings of Bareau	
	d. Petitioner's process would have been contrary to a POSITA's goal of improving performance	37
	e. Dependent claims 2, 3, and 5-8.	
В.		ļ
	Datoud	



	1.	The Petition Fails to Demonstrate that Claims 11-17 are Unpatentable Over the First Modification of Ogino Example 5
		in view of Bareau. 40
	a.	Petitioner ignores the manufacturability of the lenses
	b. optical	Petitioner's proposed assembly has overlapping lenses in the region of the rays
	c. improv	Petitioner's process would have been contrary to a POSITA's goal of ving performance
	d.	Petitioner's differing results for Example 5 of Ogino are not explained 45
	e. POSIT	Petitioner's lens dimensions would not have been acceptable to a A
	f. no exp	Petitioner tries to combine two modifications to Exampel 5 of Ogino with lanation
	2.	The Petition Fails to Demonstrate that Claims 1-10 and 18-24 are Unpatentable Over the Second Modification of Ogino Example 5 in view of Bareau
	a.	Petitioner ignores the manufacturability of the lenses
	b. improv	Petitioner's process would have been contrary to a POSITA's goal of ving performance
	c.	Petitioner ignores how a POSITA would actually design a lens
	d.	Petitioner's differing results for Example 5 of Ogino are not explained 53
	e.	Dependent claims 2-10, 12-17 and 19-24
VII.		TIONER FAILS TO MEET ITS BURDEN FOR LLENGED CLAIM
VIII.	CON	CLUSION 55



Case No. IPR2020-00897 U.S. Patent No. 10,324,277

TABLE OF AUTHORITIES

Cases

829 F.3d 1364 (Fed. Cir. 2016)	
Wasica Finance GMBH v. Continental Auto. Systems, 853 F.3d 1272 (Fed. Cir. 2017)	55



PATENT OWNER'S EXHIBIT LIST

Exhibit No	Description
2001	Declaration of Tom D. Milster, Ph.D.
2002	Curriculum Vitae of Tom D. Milster, Ph.D.
2003	Deposition transcript of José Sasián, February 19, 2021
2004	José Sasián, Introduction to Lens Design (2019)
2005	Declaration of José Sasián in IPR2020-00897
2006	McGuire Jr, J. P., & Kuper, T. G. (2012, October). Approaching di-
	rect optimization of as-built lens performance. In Novel Optical Sys-
	tems Design and Optimization XV (Vol. 8487, p. 84870D).
	International Society for Optics and Photonics
2007	Sturlesi, D., & O'Shea, D. C. (1991). Global view of optical design
	space. Optical engineering, 30(2), 207-218
2008	Symmons and Schaub, Field Guide to Molded Optics (2016)
2009	Declaration of Tom Milster in IPR2020-00878



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.

