

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

COREPHOTONICS, LTD.,
Patent Owner.

Case No. IPR2020-00905
U.S. Patent No. 10,225,479

PATENT OWNER'S SUR-REPLY

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Patent Owner's Exhibit List

Exhibit No.	Description
2001	Declaration of John C. Hart, Ph.D.
2002	Fredo Durand, Presentation Titled "Photography 101"
2003	Curriculum Vitae of John C. Hart, Ph.D.
2004	Complaint for Patent Infringement, Dkt. No. 1, Case No. 19-cv-4809 (United States District Court, Northern District of California)
2005	Answer to Complaint for Patent Infringement, Dkt. No. 17, Case No. 19-cv-4809 (United States District Court, Northern District of California)
2006	Corephotonics Proposal: "Dual Aperture Image Fusion Technology, Proposed Engagement Framework" (June 22, 2014)
2007	Email chain with emails dating from July and August 2014
2008	Email chain with emails dating from March 2015
2009	Email dated December 21, 2015
2010	Email chain with emails dating from August 2016
2011	Email dated May 23, 2013
2012	Email dated May 23, 2013
2013	Declaration of Eran Kali
2014	Transcript of January 21, 2021 Video-Recorded Deposition of Fredo Durand, Ph.D.
2015	Declaration of Duncan Moore, Ph.D.
2016	Rudolf Kingslake, "Optics in Photography" (1992)
2017	Curriculum Vitae of Duncan Moore, Ph.D.
2018	Email chain with emails dating from June and July 2013
2019	Email chain with emails dating from June and July 2013
2020	Email chain with emails dating from October 2013
2021	Technology Evaluation Agreement dated August 8, 2013
2022	Email chain with emails dating from September 18, 2013
2023	Email dated May 21, 2014
2024	Reserved
2025	Reserved
2026	Deposition transcript of José Sasián, November 9, 2020
2027	José Sasián, Introduction to Lens Design (2019), hardcopy

2028	Tigran V. Galstian, Smart Mini-Cameras (2014)
2029	Dmitry Reshidko and Jose Sasián, “Optical analysis of miniature lenses with curved imaging surfaces,” <i>Applied Optics</i> , Vol. 54, No. 28, E216-E223 (October 1, 2015)
2030	José Sasián, Introduction to Aberrations in Optical Imaging Systems (2013), hardcopy
2031	Yufeng Yan and Jose Sasián, “Miniature Camera Lens Design with a Freeform Surface,” Design and Fabrication Congress (2017)
2032	Peter Clark, “Mobile platform optical design,” Proc. SPIE 9293, International Optical Design Conference 2017, 92931M (17 December 2014)
2033	Jane Bareau and Peter P. Clark, “The Optics of Miniature Digital Camera Modules,” SPIE Vol. 6352, International Optical Design Conference 2006, 63421F.
2034	Yufeng Yan, “Selected Topics in Novel Optical Design,” Ph.D. Dissertation (2019)
2035	Declaration of Jose Sasián, Ph.D. from IPR2020-00489
2036	Transcript of January 26, 2021 Video-Recorded Deposition of Fredo Durand, Ph.D.
2037	U.S. Patent No. 8,989,517 (“Morgan-Mar”)
2038	Forsyth and Ponce, “Computer Vision: A Modern Approach” (1st ed.) (2003)
2039	Declaration of Marc A. Fenster in Support of Motion to Appear Pro Hac Vice on Behalf of Patent Owner Corephotonics, Ltd.
2040	Declaration of James S. Tsuei in Support of Motion to Appear Pro Hac Vice on Behalf of Patent Owner Corephotonics, Ltd.
2041	Transcript of June 8, 2021 Video-Recorded Deposition of Frédo Durand, Ph.D.

I. INTRODUCTION

On Reply, Petitioner fails to rebut the core arguments made in Corephotonics' response. Petitioner even modifies its construction of a critical claim limitation. Even with this improper revision, it continues to rely on an untenable construction for a critical claim phrase to improperly broaden the scope of the claims to better match its asserted prior art. Petitioner also fails to address the motivation of a person of ordinary skill in the art ("POSITA") to combine the various embodiments of Parulski and Konno.

Accordingly, the Board should deny the Petition and find the challenged claims not unpatentable.

II. CLAIM CONSTRUCTION

A. "fused image with a point of view (POV) of the Wide camera" (claims 1 and 23)

Corephotonics' Construction	Apple' Construction
"fused image in which the positions and shapes of objects reflect the POV of the Wide camera."	"a fused image that maintains the Wide camera's field of view or both the Wide camera's field of view and position."

In its Reply, Petitioner, and its expert Dr. Durand, appear to concede that its original construction in the Petition is non-sensical. Ex. 1003 at ¶¶ 6-8. In

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