# UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner

v.

COREPHOTONICS, LTD.

Patent Owner

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Case No. IPR2018-01133 U.S. Patent No. 9,538,152

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**PETITIONER'S REPLY** 



## **Table of Contents**

I.	Introduction1					
II.	Claim Construction1					
	A.	No construction is necessary for the term "point of view."				
III.	The evidence of record supports the Border/Parulski combination					
	A.	Patent Owner mischaracterizes Border's image stitching and image registration				
		1.	Patent Owner oversimplifies Border's image stitching3			
		2.	Patent Owner incorrectly limits Border's image registration to a "simple homography registration."			
	B.	Patent Owner misrepresents Petition's use of Parulski in the combination				
		1.	Petitioner relies on Border for establishing a primary/non-primary image relationship			
		2.	Petition relies on Parulski's image combination teachings for obtaining an output image using primary/non-primary images.			
	C.	Bord	A POSITA would have understood why and how to combine Border with Parulski's generating an enhanced primary image using a secondary image			
		1.	Patent Owner's "addition" of Parulski's "primary/non-primary image designation step" to Border is unnecessary because Border itself establishes the primary/non-primary relationship11			
		2.	Modifications to Border to accommodate Parulski's teachings would have been within the skill of a POSITA12			
IV.	Border and Parulski render claims 1 and 3 obvious					
	A.	The Border/Parulski combination renders obvious [1.10]: "wherein if $FOV_2 < FOV_{ZF} < FOV_1$ then the point of view of the output image is that of the first camera."				
		1.	Patent Owner's importation of extraneous requirements into the claim language "the point of view of the output image is that of the first camera" should be rejected			



			11 12010 01135 (1 dtent 110. 7,350,1	122)	
		2.	Border teaches this limitation.	16	
		3.	The Border/Parulski combination teaches this limitation	20	
	B.	The Border/Parulski combination renders obvious [1.11]: "the processor further configured to register the overlap area of the second image as non-primary image to the first image as primary image to obtain the output image."			
		1.	Patent Owner's importation of extraneous requirements into the claim language "register the overlap areato obtain the output image" should be rejected	22	
		2.	Border teaches the partial claim limitation "configured to register the overlap areato obtain the output image."	23	
		3.	The Border/Parulski combination teaches this limitation	25	
V.	Border and Parulski render claims 2 and 4 obvious2				
	A.	Border teaches that if FOV <sub>2</sub> ≥FOV <sub>ZF</sub> , then the processor is further configured to provide an output image from a point of view of the second camera			
	B.	The E	Border/Parulski combination renders claims 2 and 4 obvious	28	
VI.	Conc	Conclusion3			
VII.	Certificate of Word Count				
CER	TIFIC	CATE	OF SERVICE	32	



## PETITIONER'S EXHIBIT LIST

Updated: June 3, 2019

APPL-1001	U.S. Patent No. 9,538,152 to Shabtay et al. (the "'152 Patent")
APPL-1002	Prosecution File History of the '152 Patent (the "'823 App")
APPL-1003	Prosecution File History of U.S. Provisional App. No.
	61/730,570 (the "'570 App")
APPL-1004	Declaration of Dr. Oliver Cossairt ("Cossairt")
APPL-1005	Curriculum Vitae of Dr. Oliver Cossairt
APPL-1006	U.S. Patent Application Publication No. 2008/0030592 to
	Border et. al ("Border")
APPL-1007	U.S. Patent No. 7,859,588 ("Parulski")
APPL-1008	Ralph E. Jacobson et al., The Manual of Photography:
	photographic and digital imaging, 9th Edition, 2000
	("Jacobson")
APPL-1009	Michael Langford et al., Langford's Advanced Photography,
	7th Edition, 2008 ("Langford")
APPL-1010	Richard Szeliski, Computer Vision: Algorithms and
	Applications, 2011 ("Szeliski")
APPL-1011	Transcript of Deposition of Dr. James Kosmach
(New)	
APPL-1012	Additional Excerpt from Richard Szeliski, Computer Vision:
(New)	Algorithms and Applications, 2011 ("Szeliski II")
APPL-1013	Supporting Declaration of Dr. Oliver Cossairt, under 37 C.F.R.
(New)	§ 1.68 ("Cossairt Supp.")

#### I. Introduction

The Petition and record as a whole provide detailed reasons why the cited art renders the challenged claims of the '152 patent obvious. None of the arguments in the Response adequately refute the evidence of record.

Patent Owner's arguments fail because they import unclaimed limitations into the claims, mischaracterize Border's teachings regarding image stitching and image registration, and disregard Parulski's teachings for modifying a primary image using a secondary image to generate an enhanced primary image. In fact, Patent Owner attempts to recast Petitioner's Border and Parulski obviousness ground as Border-only anticipation (Response, 26n2 and 27) for the claim limitations in dispute. As discussed below, Patent Owner's arguments are incorrect, unsupported, and should be rejected.

### II. Claim Construction

## A. No construction is necessary for the term "point of view."

Patent Owner "believes that the term 'point of view' requires no construction," but proposes that "[s]hould the Board conclude that it is necessary to construe 'point of view,' that term should be construed as 'camera angle.'" Response, 13.

Because Patent Owner fails to explain why construing the term "point of view" is necessary and states that it believes that the term 'point of view' requires no construction, no construction is necessary for the term "point of view." APPL-1013, ¶¶2-3.



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