# 

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,402,032



## **TABLE OF CONTENTS**

I.	INTR	RODUCTION1			
II.	MANDATORY NOTICES1				
	A.	Real Party-in-Interest	1		
	B.	Related Matters	2		
	C.	Lead and Back-up Counsel and Service Information	2		
III.	GRO	UNDS FOR STANDING	.2		
IV.	NOT	E REGARDING PAGE CITATIONS AND EMPHASIS	.3		
V.	OVERVIEW OF THE '032 PATENT				
	A.	Summary of the Patent	3		
	B.	Prosecution History	6		
VI.	LEVI	EL OF ORDINARY SKILL IN THE ART	.7		
VII.	CLAIM CONSTRUCTION8				
	A.	"Total Track Length (TTL)"	8		
	B.	"Effective Focal Length (EFL)"	9		
VIII.		ELIEF REQUESTED AND THE REASONS FOR THE EQUESTED RELIEF10			
IX.	IDENTIFICATION OF HOW THE CLAIMS ARE UNPATENTABLE10				
	A.	Challenged Claims	0		
	B.	Statutory Grounds for Challenge	1		
	C.	Claims 1 and 13 are anticipated under post-AIA 35 U.S.C. § 102(a)(2) by Ogino	1		



		1.	Summary of Ogino	11
		2.	Claim 1	16
		3.	Claim 13	32
	D.		ns 14 and 15 are obvious under post-AIA 35 U.S.C. § 103 Ogino in view of Chen II	34
		1.	Summary of Chen II	34
		2.	Reasons to combine Ogino and Chen II	36
		3.	Claim 14	46
		4.	Claim 15	61
X.	CON	CLUS	ION	.63
CER	TIFICA	ATE O	F WORD COUNT	.64
CER'	TIFICA	ATE O	F SERVICE	.65

## **PETITIONER'S EXHIBIT LIST**

May 22, 2018

Ex.1001	U.S. Patent No. 9,402,032
Ex.1002	Prosecution History of U.S. Patent No. 9,402,032
Ex.1003	Declaration of José Sasián, Ph.D, under 37 C.F.R. § 1.68
Ex.1004	Curriculum Vitae of José Sasián
Ex.1005	U.S. Patent No. 9,128,267 to Ogino et al. ("Ogino")
Ex.1006	Warren J. Smith, Modern Lens Design (1992) ("Smith")
Ex.1007	U.S. Patent No. 7,918,398 to Li et al. ("Li")
Ex.1008	U.S. Patent No. 7,777,972 to Chen et al. ("Chen")
Ex.1009	U.S. Patent No. 8,233,224 to Chen ("Chen II")
Ex.1010	Max Born et al., PRINCIPLES OF OPTICS, 6 <sup>th</sup> Ed. (1980) ("Born")
Ex.1011	Prosecution history of U.S. Patent No. 9,128,267 to Ogino
Ex.1012	Jane Bareau et al., "The optics of miniature digital camera modules," SPIE Proceedings Volume 6342, <i>International Optical Design Conference</i> 2006; 63421F (2006) https://doi.org/10.1117/12.692291 ("Bareau")



### I. INTRODUCTION

U.S. Patent No. 9,402,032 ("the '032 patent," Ex.1001) is generally directed to "[a]n optical lens assembly [that] includes five lens elements and provides a TTL/EFL<1.0." Ex.1001, Abstract. The claims of the '032 patent similarly recite "a plurality of refractive lens elements" with a number of limitations such as "a total track length (TTL) of 6.5 millimeters or less," "a first lens element with positive refractive power," "a second lens element with negative refractive power," and "a focal length fl of the first lens element [that] is smaller than TTL/2." Ex.1001, 7:43-53. As shown in this Petition, these concepts in a lens assembly with five lens elements were known in the art before the priority date of the '032 patent.

This Petition, along with the cited evidence, demonstrates that claims 1 and 13 of the '032 patent are anticipated under post-AIA 35 U.S.C. § 102(a)(2) and claims 14 and 15 of the '032 patent are rendered obvious under post-AIA 35 U.S.C. § 103. Apple Inc. ("Petitioner") therefore respectfully requests that these claims be found unpatentable and cancelled.

### II. MANDATORY NOTICES

## A. Real Party-in-Interest

The real party-in-interest is Apple Inc.



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