Paper No
UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
APPLE INC., Petitioner, v.
COREPHOTONICS, LTD., Patent Owner
IPR2020-00897 Patent No. 10,324,277



PETITIONER'S REPLY

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II.	Claims 1-3 and 5-8 are obvious over Ogino's Example 4 in view of Bareau				
	A.	A POSITA would have been motivated to modify Ogino's Example 4 as shown.			
		1.	Dr. Sasián used the same techniques that a POSITA would have used to generate the modified Ogino Example 4.		
	В.		modified Example 4 does not include overlapping		
	C.		refacturing considerations are not required by the as nor can they be imported to avoid unpatentability		
		1.	Patent Owner seeks to import manufacturing requirements into the claims where there are none.		
		2.	Patent Owner's arguments contradict its statements in a related case that lens design is separate from manufacturing.		
		3.	Manufacturing considerations are preferences, and do not show that lenses cannot be physically produced.		
		4.	The modified Example 4 would be suitable for applications outside of large-scale manufacturing		
		5.	Whether a prior art lens design is "finished" is not relevant.		
	D.	The requir	claims do not include relative illumination rements.		
III.	Claims 11-17 are obvious over Ogino's Example 5 in view of Bareau (first modification).				



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PETITIONER'S EXHIBIT LIST

Updated: June 21, 2021

APPL-1001	U.S. Patent No. 10,324,277
APPL-1002	Prosecution History of U.S. Patent No. 10,324,277
APPL-1003	Declaration of José Sasián, Ph.D., under 37 C.F.R. § 1.68
APPL-1004	Curriculum Vitae of José Sasián
APPL-1005	U.S. Patent No. 9,128,267 to Ogino et al. ("Ogino")
APPL-1006	Warren J. Smith, Modern Lens Design (1992) ("Smith")
APPL-1007	William S. Beich et al., "Polymer Optics: A manufacturer's perspective on the factors that contribute to successful programs," SPIE Proceedings Volume 7788, Polymer Optics Design, Fabrication, and Materials (August 12, 2010), https://doi.org/10.1117/12.861364 ("Beich")
APPL-1008	U.S. Patent No. 7,777,972 to Chen et al. ("Chen")
APPL-1009	Reserved
APPL-1010	Max Born et al., PRINCIPLES OF OPTICS, 6 th Ed. (1980) ("Born")
APPL-1011	Prosecution history of U.S. Patent No. 9,128,267 to Ogino
APPL-1012	Jane Bareau et al., "The optics of miniature digital camera modules," SPIE Proceedings Volume 6342, <i>International Optical Design Conference 2006</i> ; 63421F (2006) https://doi.org/10.1117/12.692291 ("Bareau")
APPL-1013	Rudolf Kingslake, Optics in Photography (1992) ("Kingslake")
APPL-1014	U.S. Patent No. 7,859,588 to Parulski et al. ("Parulski")
APPL-1015	Japanese Patent Pub. No. JP2013106289 to Konno et al. and certified English translation



APPL-1016	Bruce J. Walker, OPTICAL ENGINEERING FUNDAMENTALS (1995) ("Walker")			
APPL-1017	Robert E. Fischer, Optical System Design (2008) ("Fischer")			
APPL-1018	Michael P. Schaub, THE DESIGN OF PLASTIC OPTICAL SYSTEMS (2009) ("Schaub")			
APPL-1019	Optical Society of America, HANDBOOK OF OPTICS, vol. II 2nd ed. (1995) ("Handbook of Optics")			
APPL-1020	U.S. Patent No. 10,324,273 to Chen et al. ("Chen")			
APPL-1021	U.S. Patent No. 9,857,568			
APPL-1022	U.S. Patent No. 9,568,712			
APPL-1023	Deposition Transcript of Duncan Moore, Ph.D. in IPR2018-01140			
APPL-1024	U.S. Patent No. 7,321,475 to Wang et al.			
APPL-1025	U.S. Patent No. 8,508,648 to Kubota et al.			
APPL-1026	Reserved			
APPL-1027	Email from Patent Owner's counsel authorizing electronic service			
APPL-1028 (NEW)	Deposition Transcript of Tom Milster, Ph.D.			
APPL-1029 (NEW)	IPR2019-00030, Paper 21			
APPL-1030 (NEW)	IPR2019-00030, Ex. 2005			
APPL-1031	Reserved			
APPL-1032	Reserved			
APPL-1033	Reserved			
APPL-1034	Reserved			



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