

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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HAMAMATSU PHOTONICS K.K.,  
Petitioner,

v.

SEMICAPS PTE LTD.,  
Patent Owner

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Case IPR2017-02110  
Patent 7,623,982

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**PATENT OWNER'S MOTION TO AMEND**

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## EXHIBIT LIST

Ex.	Description
2001	Email dated April 5, 2006 from Alfred Quah to Co-inventors attaching Ex. 2002
2002	Email Attachment - Alfred Quah, et al., "Enhanced Detection Sensitivity with Pulsed Laser Signal Integration Algorithm" (April 4, 2006)
2003	Email dated May 25, 2006 from ASM International to Co-inventors RE Acceptance
2004	Declaration of Dr. Michael Bruce
2005	Declaration of ASM International
2006	Patents of Dr. Michael Bruce
2007	Relevant pages from AMERICAN HERITAGE DICTIONARY
2008	Relevant pages from Julian Heath, DICTIONARY OF MICROSCOPY (Wiley 2005)
2009	Relevant pages from Jeff Hecht, UNDERSTANDING LASERS (IEEE 1992)
2010	Relevant pages from Dipak Basu, PURE AND APPLIED PHYSICS (CRC Press 2001)
2011	Declaration of Alfred Quah
2012	DC Winburn: WHAT EVERY ENGINEER SHOULD KNOW ABOUT LASERS
2013	Email from ASM to M. Bruce RE Submission Date and Deadline
2014	S. Tumanski, PRINCIPLES OF ELECTRICAL MEASUREMENT (CRC Press 2006)
2015	Levert Sevgi, "Digital Multi-Meters and Basic Measurements" IEEE Antennas and Propagation Magazine, Vol. 49, No. 4 (August 2007)

2016	Second Declaration of Alfred Quah RE Authenticity of Email Correspondence
2017	Proceedings of the 32nd International Symposium for Testing and Failure Analysis (November 14, 2006)
2018	Excerpt of Ex. 1004, p. 14, marked up by Dr. Mercer during cross-examination
2019	Transcript of Cross-Examination of Dr. Mercer, May 22, 2018
2020	JP H11-316266 (“Kiyoshi”)
2021	Cole, et al., BACKSIDE LOCALIZATION OF OPEN AND SHORTED IC INTERCONNECTIONS, 36 <sup>th</sup> Annual International Reliability Physics Symposium, Reno, Nevada, 1998 (IEEE 98CH36173) (“Cole”)
2022	Excerpts from Dueck, FUNDAMENTAL OF DIGITAL ELECTRONICS, West Publishing Company, 1994
2023	Excerpts from Carr, DESIGNER’S HANDBOOK OF INSTRUMENTATION AND CONTROL CIRCUITS, Academic Press, Inc. 1991
2024	Excerpts from AGILENT TECHNOLOGIES TEST & MEASUREMENT CATALOG 2001
2025	English language translation of Kiyoshi
2026	Excerpts from Schlag, et al., IMPLEMENTATION OF AUTOMATIC FOCUSING ALGORITHMS FOR A COMPUTER VISION SYSTEM WITH CAMERA CONTROL, Dept. of Electrical Engineering, Robotics Institute, Carnegie-Mellon University, 1983
2027	Nikawa, et al., VARIOUS CONTRASTS IDENTIFIABLE FROM THE BACKSIDE OF A CHIP BY 1.3 μM LASER BEAM SCANNING AND CURRENT CHANGE IMAGING, Proceedings of the 22 <sup>nd</sup> International Symposium for Testing and Failure Analysis, 18-22 November 1996, Los Angeles (ISTFA ’96)

2028	Excerpt from File History of U.S. Pat. No. 7,623,982, Specification, Claims, Abstract, and Drawings as filed (“Disclosure”)
2029	Declaration of Dr. Gary Woods
2030	Excerpts from Horowitz, et al., THE ART OF ELECTRONICS, 2 <sup>nd</sup> Ed., Cambridge University Press, 1995

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