

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUMENTUM HOLDINGS, INC., LUMENTUM INC.,
LUMENTUM OPERATIONS, LLC,
CORIANT OPERATIONS, INC., CORIANT (USA) INC.,
CIENA CORPORATION, CISCO SYSTEMS, INC., and
FUJITSU NETWORK COMMUNICATIONS, INC.,
Petitioner,

v.

CAPELLA PHOTONICS, INC.
Patent Owner.

Case IPR2015-00739¹
Patent RE42,678

**PATENT OWNER'S UPDATED EXHIBIT LIST
PURSUANT TO 37 C.F.R. § 42.63(e)**

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

¹ Case IPR2015-01971 has been joined with this proceeding.

EXHIBIT LIST

| Exhibit No. | Reference |
|-------------|--|
| 2001 | Defendant's Motion to Transfer Venue, Capella Photonics, Inc. v. Cisco Systems, Inc., Case Number: 1:14-cv-20529-PAS, Docket No. 19, April 4, 2014. |
| 2002 | <i>Capella Photonics Launches Dynamically Reconfigurable Wavelength Routing Subsystems, Offering Unprecedented Operating Cost Savings and Flexibility for Telecom Service Providers</i> , Business Wire (June 2, 2003, 8:16 AM), http://www.businesswire.com/news/home/20030602005554/en/Capella-Photonics-Launches-Dynamically-Reconfigurable-Wavelength-Routing . |
| 2003 | WavePath 4500 Product Brief, Capella, http://www.capellainc.com/downloads/WavePath%204500%20Product%20Brief%20030206B.pdf . |
| 2004 | U.S. Provisional Patent Application No. 60/183,155 |
| 2005 | Deposition Transcript of Dan M. Marom, Ph.D. |
| 2006 | Benjamin B. Dingel & Achyut Dutta, <i>Photonic Add-Drop Multiplexing Perspective for Next Generation Optical Networks</i> , 4532 SPIE 394 (2001). |
| 2007 | Tze-Wei Yeow, K. L. Eddie Law, & Andrew Goldenberg, <i>MEMS Optical Switches</i> , 39 IEEE Comm. I Mag. no. 11, 158 (2001). |
| 2008 | Clifford Holliday, Components for R-OADMs '05 (B & C Consulting Services & IGI Consulting Inc. 2005) (Excerpts). |
| 2009 | Patrick B. Chu et al., <i>MEMS: the Path to Large Optical Crossconnects</i> , 40 IEEE Comm. I Mag. no. 3, 80 (2002). |
| 2010 | Clifford Holliday, <i>Switching the Lightwave: OXC's – The Centerpiece of All Optical Network</i> (IGI Consulting Inc. & B & C Consulting Services 2001) (Excerpts). |

| Exhibit No. | Reference |
|-------------|--|
| 2011 | An Vu Tran et al., <i>Reconfigurable Multichannel Optical Add-Drop Multiplexers Incorporating Eight-Port Optical Circulators and Fiber Bragg Gratings</i> , 13 Photonics Tech. Letters, IEEE, no. 10, 1100 (2001). |
| 2012 | Jungho Kim & Byoung-ho Lee, <i>Bidirectional Wavelength Add-Drop Multiplexer Using Multiport Optical Circulators and Fiber Bragg Gratings</i> , 12 IEEE Photonics Tech. Letters no. 5, 561 (2000). |
| 2013 | U.S. Patent No. 6,984,917 to Greywall & Marom. |
| 2014 | U.S. Patent No. 6,657,770 to Marom et al. |
| 2015 | Affidavit of Nicholas J. Nowak in Support of <i>Pro Hac Vice</i> Admission Under 37 C.F.R. § 42.10(c) |
| 2016 | Max Born & Emil Wolf, <i>Principles of Optics</i> (Cambridge Univ. Press, 6th Corrected Ed. 1986) (Excerpts). |
| 2017 | U.S. Patent No. 6,543,286 to Garverick et al. |
| 2018 | U.S. Patent No. 5,629,790 to Neukermans et al. |
| 2019 | Fraine, D.S. Simon, O. Minaeva, R. Egorov, and A.V. Sergienko, <i>Precise evaluation of polarization mode dispersion by separation of even- and odd-order effects in quantum interferometry</i> , Optics Express v. 19, no. 21, 22820 (2011). |
| 2020 | Abdul Al-Azzawi, <i>Fiber Optics: Principles and Practices</i> (CRC Press 2006). |
| 2021 | <i>Metallic Coatings</i> , Eksma Optics, available at http://eksmaoptics.com/optical-components/coatings/metallic-coatings/ . |
| 2022 | Declaration of Dr. Alexander V. Sergienko in Support of the Patent Owner Response (“Sergienko Dec.”) |
| 2023 | Curriculum Vitae of Dr. Alexander V. Sergienko |
| 2024 | Network Strategy Partners, LLC, <i>The Business Case for ROADM Technology</i> (2006), available at https://web.archive.org/web/20130605173554/http://www.cisco.com/en/US/prod/collateral/optical/ps5724/ps2006/prod_white_paper0900aecd8052b792.pdf . |

| Exhibit No. | Reference |
|--------------------|--|
| 2025 | Herzel Laor et al., <i>Construction and Performance of a 576x576 Single-Stage OXC</i> , in 2 IEEE Lasers and Electro-Optics Society 1999 12th Annual Meeting, at 481 (1999). |
| 2026 | U.S. Patent No. 6,798,941 to Smith et al. |
| 2027 | Ming C. Wu, Olav Solgaard, & Joseph E. Ford, <i>Optical MEMS for Lightwave Communication</i> , 24 J. Lightwave Tech. 4433 (2006). |
| 2028 | U.S. Patent No. 6,178,284 to Bergmann & Joseph E. Ford et al. |
| 2029 | U.S. Patent No. 6,178,033 to Joseph E. Ford et al. |
| 2030 | U.S. Patent No. 6,859,573 to Bouevitch et al. |
| 2031 | J. E. Ford, <i>Optical MEMS: Legacy of the telecom boom</i> , Solid-State Sensor, Actuator and Microsystems Workshop, Hilton Head, SC, Jun. 6-10 (2004). |
| 2032 | Deposition Transcript of Mr. Sheldon McLaughlin for Cases IPR2015-00731 and IPR2015-00739, dated October 22, 2015 |
| 2033 | U.S. Patent No. 7,676,126 to McLaughlin et al. |
| 2034 | U.S. Patent No. 8,233,794 to Colbourne & McLaughlin et al. |
| 2035 | Transcript of PTAB Teleconference dated February 2, 2016 |
| 2036 | Transcript of PTAB Teleconference dated February 24, 2016 |
| 2037 | Demonstratives for Oral Argument |

Respectfully Submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Date: May 23, 2016

/Jason D. Eisenberg/

Jason D. Eisenberg, Reg. 43,447
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, NW
WASHINGTON, D.C. 20005
(202) 371-8645
Counsel for Patent Owner