

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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FUJITSU NETWORK COMMUNICATIONS, INC.,  
CORIANT OPERATIONS, INC., CORIANT (USA) INC.,  
CIENA CORPORATION  
Petitioners

v.

CAPELLA PHOTONICS, INC.  
Patent Owner

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Case IPR2015-00727<sup>1</sup>  
Patent No. RE42,678 E

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**PATENT OWNER'S UPDATED EXHIBIT LIST**

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<sup>1</sup> Case IPR2015-01961 has been joined with this proceeding.

**Exhibit List**

<b>Exhibit Number</b>	<b>Reference</b>
2001	Patent Owner Response, <i>Cisco Systems, Inc. v. Capella Photonics, Inc.</i> , Case IPR2014-01166, filed May 7, 2015.
2002	Clifford Holliday, Components for R-OADM's '05 (B & C Consulting Services & IGI Consulting Inc. 2005). ("Holliday R-OADM's")
2003	WavePath 4500 Product Brief, accessed at <a href="http://www.capellainc.com/downloads/WavePath%204500%20Product%20Brief%20030206B.pdf">http://www.capellainc.com/downloads/WavePath%204500%20Product%20Brief%20030206B.pdf</a> . ("WavePath")
2004	Cisco's Renewed Motion and Memorandum in Support of Motion for Stays Pending Final Determinations of Validity by the Patent Office, <i>Capella Photonics, Inc. v. Cisco Systems, Inc.</i> , Case No. 14-cv-03348-EMC (N.D. Cal.), filed February 12, 2015. ("Cisco's Mot. for Stay")
2005	Order Regarding Cisco's Pending Motion for Litigation Stay Pending <i>Inter Partes</i> Review, <i>Capella Photonics, Inc. v. Cisco Systems, Inc.</i> , Case Nos. 14-cv-03348-EMC, 14-cv-03350, and 14-cv-3351 (N.D. Cal.), ordered March 3, 2015. ("14-cv-03348 Slip op.")
2006	U.S. Patent No. 6,768,571 to Azarov et al. ("Azarov")
2007	The Random House Dictionary of the English Language, 1987, pp. 404, 742 ("Random House Dictionary")
2008	Provisional Patent Application No. 60/267,285 ("285 provisional")
2009	Transcript of Patent Trial and Appeal Board Conference Call for Cases IPR2014-01166 (merged with IPR2015-00816), IPR2014-01276 (merged with IPR2015-00894), IPR2015-00726, and IPR2015-00727, dated September 23, 2015.
2010	Transcript of Patent Trial and Appeal Board Conference Call for Cases IPR2015-00726 and IPR2015-00727, dated October 29, 2015.

<b>Exhibit Number</b>	<b>Reference</b>
2011	Redline Comparison of Paragraph 166 of Drabik Declaration (Ex. 1016) and Ford Declaration (Ex. 1037)
2012	Provisional Patent Application No. 60/277,217 (“678 provisional”)
2013	John C. McNulty, <i>A perspective on the reliability of MEMS-based components for telecommunications</i> , Proc. SPIE 6884, Reliability, Packaging, Testing, and Characterization of MEMS/MOEMS VII, 68840B (February 18, 2008)
2014	<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), <a href="http://www.businesswire.com/news/home/20030602005554/en/Capella-Photonics-Launches-Dynamically-Reconfigurable-Wavelength-Routing">http://www.businesswire.com/news/home/20030602005554/en/Capella-Photonics-Launches-Dynamically-Reconfigurable-Wavelength-Routing</a> . (“Business Wire”)
2015	Benjamin B. Dingel & Achyut Dutta, <i>Photonic Add-Drop Multiplexing Perspective for Next Generation Optical Networks</i> , 4532 SPIE 394 (2001). (“Dingel”)
2016	Tze-Wei Yeow, K. L. Eddie Law, & Andrew Goldenberg, <i>MEMS Optical Switches</i> , 39 IEEE Comm. I Mag. no. 11, 158 (2001). (“Yeow”)
2017	Patrick B. Chu et al., <i>MEMS: the Path to Large Optical Crossconnects</i> , 40 IEEE Comm. I Mag. no. 3, 80 (2002). (“Chu”)
2018	Clifford Holliday, <i>Switching the Lightwave: OXC’s – The Centerpiece of All Optical Network</i> (IGI Consulting Inc. & B & C Consulting Services 2001). (“Holliday OXC”)
2019	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). (“Tran”)
2020	Jungho Kim & Byoungho Lee, <i>Bidirectional Wavelength Add-Drop Multiplexer Using Multiport Optical Circulators and Fiber Bragg Gratings</i> , 12 IEEE Photonics Tech. Letters no. 5, 561

Exhibit Number	Reference
	(2000). (“Kim”)
2021	Max Born & Emil Wolf, Principles of Optics (Pergamon Press, 6th Corrected Ed. 1986) (Excerpts). (“Born”)
2022	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). (“Fraine”)
2023	Abdul Al-Azzawi, Fiber Optics: Principles and Practices (CRC Press 2006). (“Al-Azzawi”)
2024	Curriculum Vitae of Dr. Alexander V. Sergienko. (“Sergienko CV”)
2025	Ming C. Wu, Olav Solgaard and Joseph E. Ford, “Optical MEMS for Lightwave Communication,” Journal of Lightwave Technology, Vol. 24, No. 12, Dec. 2006, pp. 4433-4454.
2026	Deposition Transcript of Joseph E. Ford, Ph.D., Taken December 11, 2015.
2027	Joseph E. Ford, <i>et al.</i> , <i>Interference-Based Micromechanical Spectral Equalizers</i> , IEEE Journal of Selected Topics in Quantum Electronics, Vol. 10, No. 3, May/June 2004. (“Ford IEEE”)
2028	Prosecution History for U.S. Patent Number 6,625,346.
2029	<i>Capella Photonics, Inc. v. Fujitsu Network Commc’ns, Inc.</i> , Defendant’s Preliminary Invalidity Contentions, Case No. 1:14-cv-20531-PAS (S.D. Fl. May 19, 2014), D.I. 49.
2030	<i>Capella Photonics, Inc. v. Cisco Sys., Inc.</i> , Defendant’s Preliminary Invalidity Contentions, Case No. 1:14-cv-20529-PAS (S.D. Fla. May 19, 2014), D.I. 39.
2031	U.S. Patent No. 6,178,284 to Bergmann, Ford, & Walker
2032	Timothy J. Drabik, Ph.D., The Press Democrat, <a href="http://www.legacy.com/obituaries/pressdemocrat/obituary.aspx?n=timothy-john-drabik&amp;pid=176215170">http://www.legacy.com/obituaries/pressdemocrat/obituary.aspx?n=timothy-john-drabik&amp;pid=176215170</a> .
2033	Declaration of Dr. Alexander Sergienko.

<b>Exhibit Number</b>	<b>Reference</b>
2034	Joseph E. Ford, Ph.D., Hand Drawing, Exhibit No. 5 for Deposition of Joseph E. Ford, Ph.D., Taken December 11, 2015.
2035	U.S. Patent No. 6,984,917 to Greywall & Marom.
2036	U.S. Patent No. 6,178,033 to Joseph E. Ford et al.
2037	U.S. Patent No. 6,859,573 to Bouevitch et al.
2038	J. E. Ford, Optical MEMS: <i>Legacy of the telecom boom</i> , Solid-State Sensor, Actuator and Microsystems Workshop, Hilton Head, SC, Jun. 6-10 (2004).
2039	December 16, 2015 e-mail from Maria Vignone responding to Patent Owner's December 11th e-mail requesting additional discovery
2040	Patent Owner's Demonstratives for Oral Argument

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

/Jason D. Eisenberg/

Jason D. Eisenberg (Reg. No. 43,447)  
Attorney for Patent Owner

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1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600