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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 Petitioner

V.

CAPELLA PHOTONICS, INC.
Patent Owner

Case IPR2015-00727¹

Patents RE42,678

TRANSMITTAL ACCOMPANYING PETITIONER'S DEMONSTRATIVES FOR ORAL ARGUMENT

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¹ Case IPR2015-01961 has been joined with this proceeding.



Listing of Exhibits

| Exhibit | Description |
|----------|--|
| Ex. 1001 | U.S. Patent No. RE42,678 to Chen et al. |
| Ex. 1002 | U.S. Patent No. 6,498,872 to Bouevitch et al. |
| Ex. 1003 | Prosecution History for U.S. Patent No. RE42,678. |
| Ex. 1004 | Joseph E. Ford et al., <i>Wavelength Add-Drop Switching Using Tilting Micromirrors</i> , 17(5) Journal of Lightwave Technology 904 (1999). |
| Ex. 1005 | U.S. Patent No. 6,442,307 to Carr et al. |
| Ex. 1006 | U.S. Patent No. 6,625,340 to Sparks et al. |
| Ex. 1007 | U.S. Patent Publication No. 2002/0081070 to Tew. |
| Ex. 1008 | U.S. Provisional Patent Application No. 60/250,520 to Tew. |
| Ex. 1009 | U.S. Patent No. 6,798,941 to Smith et al. |
| Ex. 1010 | U.S. Provisional Patent Application No. 60/234,683 to Smith et al. |
| Ex. 1011 | J. Alda, "Laser and Gaussian Beam Propagation and Transformation," in <i>Encyclopedia of Optical Engineering</i> , R. G. Driggers, Ed. Marcel Dekker, 2003, pp. 999–1013. ("Alda") |
| Ex. 1012 | Joint Claim Construction and Prehearing Statement, Capella Litigation, Case No. 3:14-cv-03348-EMC, Dkt. 151. |
| Ex. 1013 | Newton's Telecom Dictionary (17th ed. 2001) (excerpted). |
| Ex. 1014 | Fiber Optics Standard Dictionary (3rd ed. 1997) (excerpted). |
| Ex. 1015 | Webster's New World College Dictionary (3rd ed. 1997) (excerpted). |
| Ex. 1016 | Declaration of Dr. Timothy Drabik. |



| Ex. 1017 | Curriculum Vitae of Dr. Timothy Drabik. |
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| Ex. 1018 | U.S. Patent No. 6,253,001 to Hoen. |
| Ex. 1019 | U.S. Patent No. 6,567,574 to Ma et al. |
| Ex. 1020 | U.S. Patent No. 6,256,430 to Jin et al. |
| Ex. 1021 | U.S. Patent No. 6,631,222 to Wagener et al. |
| Ex. 1022 | U.S. Patent No. 5,414,540 to Patel et al. |
| Ex. 1023 | U.S. Patent Publication No. 2002/0097956. |
| Ex. 1024 | Shigeru Kawai, Handbook of Optical Interconnects (2005) (excerpted). |
| Ex. 1025 | U.S. Patent No. 6,798,992 to Bishop et al. |
| Ex. 1026 | Joseph W. Goodman, <u>Introduction to Fourier Optics</u> , Second Edition, McGraw-Hill (1996). |
| Ex. 1027 | U.S. Patent No. 6,204,946 to Aksyuk et al. |
| Ex. 1028 | L.Y. Lin, "Free-Space Micromachined Optical Switches for Optical Networking, <i>IEEE Journal of Selected Topics In Quantum Electronics</i> ," Vol. 5, No. 1, pp. 4–9, Jan./Feb. 1999. |
| Ex. 1029 | SS. Lee, "Surface-Micromachined Free-Space Fiber Optic Switches With Integrated Microactuators for Optical Fiber Communications Systems," in <i>Tech. Dig. 1997 International Conference on Solid-State Sensors and Actuators</i> , Chicago, June 16-19, 1997, pp. 85–88. |
| Ex. 1030 | H. Laor, "Construction and performance of a 576×576 single-stage OXC," in <i>Tech. Dig. LEOS</i> '99 (vol. 2), Nov. 8–11, 1999, pp. 481–482. |
| Ex. 1031 | R. Ryf, "1296-port MEMS Transparent Optical Crossconnect with 2.07 Petabit/s Switch Capacity," in <i>Tech. Dig. OSA Conference on Optical Fiber Communication</i> , March 2001, pp. PD28-1–PD28-3. |
| Ex. 1032 | A. Husain, "MEMS-Based Photonic Switching in Communications Networks," in <i>Tech. Dig. OSA Conference on Optical Fiber Communication</i> , 2001, pp. WX1-1–WX1-3. |



| Ex. 1033 | U.S. Patent No. 5,661,591 to Lin et al. |
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| Ex. 1034 | H. Laor et al., "Performance of a 576×576 Optical Cross Connect," <i>Proc. of the Nat'l Fiber Optic Engineers Conference</i> , Sept. 26-30, 1999. |
| Ex. 1035 | V. Dhillon. (2012, Sep. 18). <i>Blazes and Grisms</i> . Available: http://www.vikdhillon.staff.shef.ac.uk/teaching/phy217/instruments/phy217_inst_blaze.html. ("Dhillon") |
| Ex. 1036 | Fianium Ltd. <i>WhiteLase SC480 New Product Data Sheet</i> . Available: http://www.fianium.com/pdf/WhiteLase_SC480_BrightLase_v1.pdf. ("Fianium") |
| Ex. 1037 | Declaration of Dr. Joseph Ford. |
| Ex. 1038 | Curriculum Vitae of Dr. Joseph Ford. |
| Ex. 1039 | Final Written Decision in <i>Cisco Systems, Inc. v. Capella Photonics, Inc.</i> , IPR2014-01276, Paper No. 40 (P.T.A.B. Feb. 17, 2016). |
| Ex. 1040 | Deposition Transcript of Dr. Alexander V. Sergienko, February 1, 2016. |
| Ex. 1041 | Deposition Transcript of Dr. Alexander V. Sergienko in <i>Cisco Systems</i> , <i>Inc. v. Capella Photonics</i> , <i>Inc.</i> , June 30, 2015. |
| Ex. 1042 | K. W. Goossen et al., "Silicon Modulator Based on Mechanically-Active Anti-Reflection Layer with 1 Mbit/sec Capability for Fiber-in-the-Loop Applications," 6 <i>IEEE Photonics Tech. Letters</i> 1119 (Sept. 1994). |
| Ex. 1043 | U.S. Patent No. 6,285,500 to Ranalli et al. |
| Ex. 1044 | Dan M. Marom et al., "Wavelength-Selective 1xK Switches Using Free-Space Optics and MEMS Micromirrors: Theory, Design, and Implementation," 23 <i>Journal of Lightwave Technology</i> 1620 (Apr. 2005). |
| Ex. 1045 | Clifford Holliday, Switching the Lightwave: OXC's – The Centerpiece of All Optical Network (IGI Consulting Inc. & B & C Consulting Services 2001). |



| Ex. 1046 | Petitioner's Demonstratives for Cases IPR2015-00726 and IPR2015- |
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