

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

JDS UNIPHASE CORPORATION
Petitioner

v.

CAPELLA PHOTONICS, INC.
Patent Owner

Case IPR2015-00731
Patent RE42,368

**DECLARATION OF DR. ALEXANDER V. SERGIENKO
IN SUPPORT OF THE PATENT OWNER RESPONSE**

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Capella 2022

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I, Dr. Alexander V. Sergienko, declare as follows:

I. INTRODUCTION

1. My name is Alexander V. Sergienko. Capella Photonics, Inc. has retained me as an expert witness. I have been asked to provide my expert opinion on the validity of claims 1-6, 9-13, and 15-22 of U.S. Patent No. RE42,368 to Chen *et al.* (“368 patent”).

2. I am being compensated for my work at a rate of \$400 per hour. My compensation is not contingent upon and in no way affects the substance of my testimony.

II. QUALIFICATIONS

3. I received my Ph.D. in Physics from Moscow State University in 1987 and my Master of Science Degree in Physics from Moscow State University in 1981.

4. I am currently a full professor at Boston University where I hold joint appointments in the Photonics Center, the Department of Electrical and Computer Engineering, and the Department of Physics. My expertise and research interests include optics, photonics, quantum physics, laser physics, nonlinear optics, and precise optical measurement in telecommunication and optical engineering.

5. I have experience and familiarity with the technical areas involved in this case. With over 30 years of research experience in the field of optics, I have

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