

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLIED MATERIALS, INC.

Petitioner,

v.

OCEAN SEMICONDUCTOR LLC,

Patent Owner.

Case IPR: Unassigned

U.S. Patent No. 9,968,248

DECLARATION OF STANLEY SHANFIELD, PH.D.

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I, Stanley Shanfield, Ph.D., hereby declare as follows:

I. OVERVIEW

1. I am over eighteen (18) years of age and otherwise competent to make this declaration.

2. I have been retained as an expert on behalf of Petitioner Applied Materials, Inc. (“Petitioner”) in connection with the above-captioned *inter partes* review of U.S. Patent No. 6,968,248 (“’248 patent”). Ex. 1001.

3. I am being compensated for my time spent on this matter at my standard consulting rate of \$385 per hour. My compensation is not dependent on the substance of my opinions, my testimony, or the outcome of the *inter partes* review proceeding.

4. I am not currently, and have not at any time in the past been, an employee of Petitioner or any affiliate or subsidiary thereof. I have no financial interest in Applied Materials, Inc.

5. I have been asked to provide my opinions regarding whether claims 1-22 of the ’248 patent are invalid as obvious to a person having ordinary skill in the art at the time of the alleged invention.

6. I understand that the ’248 patent issued from U.S. App. No. 11/151,098 (“’098 application”), which claims priority to U.S. App. No. 10/135,145 (“’145 application”), now U.S. Patent No. 6,907,305 (“’305 patent”).

Ex. 1001, Ex. 1002. I understand that the earliest priority date claimed by the '248 patent is April 30, 2002, which is the filing date of the '145 application. I further understand that, according to USPTO records, the '248 patent is currently assigned to Ocean Semiconductor LLC ("Ocean"). Ex. 1010.

7. This declaration summarizes the opinions I have formed to date. I reserve the right to modify my opinions, if necessary, based on further review and analysis of information that I receive subsequent to the filings of this declaration, including in response to positions that parties to the *inter partes* review proceeding, or their experts, may take that I have not yet seen.

II. EXPERIENCE AND QUALIFICATIONS

8. I have four decades of professional experience as a practicing engineer in the field of semiconductor fabrication, circuit design, and electronic module design and fabrication. My professional qualifications, experience, publications, presentations, the patents on which I am a named inventor, and a list of previous cases in which I have provided expert testimony are set forth in my *curriculum vitae*, attached as Exhibit 1004.

9. I received my Bachelor of Science degree in Physics from the University of California, Irvine, in 1977. I received my Ph.D. from the Massachusetts Institute of Technology ("MIT") in 1981, with a dissertation on high field superconductors. During my doctoral program at MIT, I received a four-

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