

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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APPLIED MATERIALS, INC.

Petitioner,

v.

OCEAN SEMICONDUCTOR LLC,

Patent Owner.

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Case IPR: Unassigned

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

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**DECLARATION OF STANLEY SHANFIELD, PH.D.**

## Table of Contents

I.	Overview.....	1
II.	Experience and Qualifications.....	2
III.	Information and Materials Considered.....	6
IV.	Legal Principles .....	9
	A. Person of Ordinary Skill in the Art (“POSA”).....	9
	B. Claim Construction.....	10
	C. Obviousness.....	10
V.	Summary of Opinions.....	12
VI.	Person of Ordinary Skill in the Art.....	13
VII.	Technical Background.....	14
VIII.	Summary of the ’248 Patent .....	22
	A. Claims.....	22
	B. Summary of the Specification.....	23
	C. Summary of the Prosecution History .....	27
	1. Parent ’145 Application Prosecution History .....	27
	2. ’098 Application Prosecution History .....	30
IX.	Overview of the Prior Art References .....	31
	A. Schulze .....	31
	B. Gupta .....	37
X.	Obviousness Analysis.....	42
	A. Combination of Schulze and Gupta .....	42
	1. A POSA Would Have Been Motivated To Adopt a Semiconductor Fabrication System With Automated Monitoring and Assessment as Taught by Schulze .....	42
	2. A POSA Would Have Been Motivated To Enhance the Operational Efficiency of Schulze’s Semiconductor Fabrication	

	System With the Event-Driven Software Local Scheduler Taught by Gupta.....	44
3.	A POSA Would Have Had a Reasonable Expectation of Success Combining Gupta With Schulze .....	47
B.	Independent Claim 1 .....	51
1.	[1.Pre] “A method for scheduling in an automated manufacturing environment” .....	51
2.	[1.a] “automatically detecting an occurrence of a predetermined event in an integrated, automated process flow” .....	52
3.	[1.b] “automatically notifying a software scheduling agent of the occurrence” .....	52
4.	[1.c] “reactively scheduling an action from the software scheduling agent responsive to the detection of the predetermined event” .....	55
C.	Independent Claim 14 .....	56
1.	“a computer system, including a plurality of software scheduling agents” .....	58
2.	“a plurality of predetermined events” .....	60
3.	“scheduling appointments for activities” .....	60
D.	Claims 6, 15, and 18.....	61
E.	Claims 2-5, 10-13, 16, 17, 21, and 22.....	65
1.	Claims 2 and 16.....	65
2.	Claims 3, 4, and 17.....	66
3.	Claims 10, 11, and 21 .....	69
4.	Claims 12, 13, and 22 .....	71
5.	Claim 5.....	73
F.	Claims 7 and 19.....	74
G.	Claims 8, 9 and 20.....	75
H.	Objective Indicia of Nonobviousness .....	76
XI.	Conclusion .....	76

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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