EXHIBIT DSS-2007



UNITED STATES PATENT AND TRADEMARK OFFICE _____

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD. (TSMC) and SAMSUNG ELECTRONICS CO., LTD (SAMSUNG), Petitioners,

v.

DSS TECHNOLOGY MANAGEMENT, INC. Patent Owner.

Case IPR2014-01030¹ Patent No. 5,625,084

DECLARATION OF DR. CHRIS A. MACK, PH.D.



¹ Case IPR2014-01493 has been joined with this proceeding.

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DECLARATION OF CHRIS A. MACK, PH.D.



I, Chris A. Mack, Ph.D., declare as follows:

I. INTRODUCTION

- 1. I am making this declaration at the request of DSS Technology Management, Inc. ("Patent Owner") in the matter of the Inter Partes Review Case No. IPR2014-01030 of U.S. Patent No. 5,652,084 (the '084 Patent").
- 2. I understand that the Patent Trial and Appeal Board ("the Board") issued a decision ("Decision") instituting trial with respect to claims 1-12, 15, and 16 of the '084 Patent on the following grounds:
 - (1) anticipation of claims 1-8, 12, 15, and 16 under 35 U.S.C. §102(b) based on Japanese Patent Application No. HEI 4[1992]-71222 ("Jinbo") (TSMC-1004);
 - (2) obviousness of claim 9 under 35 U.S.C. §103(a) based on Jinbo in view of U.S. Patent No. 4,931,351 ("McColgin") (TSMC-1006); and
 - (3) obviousness of claims 10 and 11 under 35 U.S.C. §103(a) based on Jinbo in view of U.S. Patent No. 4,548,688 ("Matthews") (TSMC-1007).

II. QUALIFICATIONS

3. I received Bachelor of Science degrees in Physics, Chemistry, Electrical Engineering, and Chemical Engineering from Rose-Hulman Institute of Technology in 1982, a Master of Science degree in Electrical Engineering from the University of Maryland in 1989, and a Ph.D. in Chemical Engineering from the University of Texas at Austin in 1998.

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- 4. In 1983, I joined the Microelectronics Research Laboratory of the National Security Agency and began work in optical lithography research.
- 5. During 1990-91, I was on assignment at SEMATECH working in the areas of deep-UV photoresist characterization and phase-shifting mask optimization, which are part of the process of photolithography for semiconductor fabrication.
- 6. In 1990, I founded FINLE Technologies, Inc. ("FINLE"). FINLE produced industry-standard lithography modeling and data analysis software that enabled semiconductor manufacturers to speed development of advanced lithography processes required to develop and produce integrated circuits with smaller geometries.
- 7. In January of 1992, I joined FINLE full time as President and Chief Technical Officer. At FINLE, I developed lithography modeling and data analysis software. Further, I provided consulting and training services to the semiconductor industry.
- 8. After KLA-Tencor Corp. acquired FINLE in February 2000, I served as Vice President of Lithography Technology for KLA-Tencor Corp. for five years.
- 9. Since 2005, I have pursued various intellectual interests—including researching, writing, and teaching lithography. I have taught numerous classes as an adjunct professor at the University of Texas at Austin, and I have taught as a visiting fellow at the University of Canterbury, in New Zealand.
- 10. My professional background and technical qualifications are stated above and are reflected in my curriculum vitae, which is attached as Exhibit A.
- 11. I have worked previously as an expert witness in several matters. Matters in which I have served as an expert witness are listed in my curriculum vitae, attached as Exhibit A.



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