

# EXHIBIT 19

**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.

DEMARAY LLC  
Patent Owner.

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Case IPR2021-00104  
Patent No. 7,381,657

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**DECLARATION OF DR. ALEXANDER GLEW IN SUPPORT OF PATENT  
OWNER'S PRELIMINARY RESPONSE**

***Mail Stop "PATENT BOARD"***  
Patent Trial and Appeal Board  
U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

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## **I. Qualification**

1. My name is Alexander D. Glew, Ph.D., P.E. My qualifications are summarized below and are addressed more fully in my CV attached as EXHIBIT A.

2. For 33 years I have been involved with engineering practice. A large portion of my work has involved semiconductor fabrication, including product design, semiconductor device analysis, semiconductor equipment design and analysis, thin film processing, equipment, characterization, and project development. I was intimately involved in this field during the time of the patents at issue in this case.

3. I received my Bachelor of Science in Mechanical Engineering from the University of California, Berkeley, in 1985; I received my Master of Science in Mechanical Engineering from the University of California, Berkeley, in 1987; I received my Master of Science in Materials Science and Engineering from Stanford University in 1995.

4. I received my Doctor of Philosophy in Materials Science and Engineering from Stanford University in 2003. My dissertation involved plasma CVD of diamond-like carbon, fluorinated diamond-like carbon, and low k dielectrics.

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