

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLIED MATERIALS, INC.
Petitioner,

v.

DEMARAY LLC
Patent Owner.

Case IPR2021-00106
Patent No. 7,381,657

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

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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.

5. I began my career with Applied Materials, Inc., one of the leading companies that supplies equipment for semiconductor manufacturer. My services to Applied Materials included various engineering roles: product development, project management, core technology, and supplier quality management. I remained at Applied Materials for ten years.

6. I hold six patents on technologies such as tungsten chemical vapor deposition, and ultra-high purity and high-temperature valves, and thin film heater and chuck design for processing chambers. I have authored or co-authored over nine articles, presentations, and seminars on topics including semiconductor thin film processing and diamond like carbon.

7. I have been asked by Demaray LLC (“Patent Owner”) to explain the technologies involved in U.S. Pat. Nos. 7,381,657 and 7,544,276 (collectively “the Demaray Patents”), the technologies described in the cited references, the knowledge of a person of ordinary skill in the art at the time of the invention, and other pertinent facts and opinions regarding IPR2021-00103 through 106. For the purpose of this declaration, I apply the same skill level as proposed in the Petition, although I reserve the right to explain why this level is too high. I am being compensated for my work on this case at a fixed, hourly rate, plus reimbursement for expenses. My compensation does not depend on the outcome of this case or any issue in it, and I have no interest in this proceeding.

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