UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOKYO ELECTRON LIMITED Petitioners

v.

DANIEL L. FLAMM, Patent Owner

Patent No. RE40,264

DECLARATION OF MARK J. KUSHNER, PH.D.

Tokyo Electron Limited EXHIBIT 1013 IPR Petition for

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1. My name is Dr. Mark J. Kushner. I am a professor of Electrical Engineering and Computer Science at the University of Michigan. I understand that my declaration is being submitted in connection with a Petition for *Inter Partes* Review of U.S. Patent No. RE40,264 ('264 patent).

I. <u>Qualifications, Background, and Experience</u>

I received a Bachelor of Science degree in nuclear engineering
(Summa Cum Laude) from the University of California at Los Angeles (UCLA) in
1976. I also simultaneously received a Bachelor of Arts in astronomy from UCLA
in 1976.

 I received a Masters of Science in Applied Physics from the California Institute of Technology in 1977. I also received a PhD in Applied Physics from the California Institute of Technology in 1979.

4. I have authored or co-authored over 320 scientific and technical journal articles. I am listed as an inventor on two U.S. patents.

5. After completing my PhD, I worked at various national laboratories and companies from 1980-1986. I was a physicist at Sandia National Laboratory in the Laser Analytical Spectroscopy Division from 1980-1981, where I focused on microelectronics related plasma etching. I was also a physicist at the Lawrence Livermore National Laboratory in the Advanced Lasers and Laser Isotope

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