UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

WESTERN DIGITAL CORPORATION
Petitioner

v.

SPEX TECHNOLOGIES, INC.
Patent Owner

Case No. IPR2017-_____

Patent 6,088,802

DECLARATION OF MARTIN KALISKI, Ph.D. IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW

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. INTRODUCTION AND QUALIFICATIONS

1. I have been retained on behalf of the Petitioner Western Digital Corporation to provide this Declaration concerning technical subject matter relevant to the *inter partes* review of U.S. Patent No. 6,088,802 ("the '802 Patent").

2. I am over 18 years of age. I have personal knowledge of the facts stated in this Declaration and could testify competently to them if asked to do so.

II. PROFESSIONAL QUALIFICATIONS

3. I hold a doctoral degree (PhD) in Electrical Engineering, granted by the Massachusetts Institute of Technology ("MIT") in 1971, as well as a Master's degree in Electrical Engineering from MIT and two Bachelor's degrees (Electrical Engineering and Mathematics), also from MIT. I received my Bachelor of Science in Electrical Engineering in 1966, and my Bachelor of Science in Mathematics in 1968. I received my Master of Science also in 1968.

4. I taught at Cal Poly, San Luis Obispo, from 1986 to 2007 in its Electrical Engineering Department. I was active in its Computer Engineering program since its inception in the early 1990s. My main areas of interest encompassed computer systems, software systems, industrial systems, control systems, digital logic, and embedded systems. I taught extensively in the latter areas in recent years, at both the undergraduate and graduate levels. My courses included undergraduate courses based upon FPGAs and CPLDs, digital logic courses, and

graduate design courses in embedded system design, oriented about microcontrollers, using both wireless and wired technologies. I also taught graduate courses in asynchronous hardware design and in computer arithmetic. I have a special interest in both software and hardware design recovery.

5. I was involved in both contract research and private consulting for close to thirty-five years. Typical project areas included software and hardware design reconstruction, software quality assurance, remote tracking technologies, algorithm development for CAD/CAM systems and expert systems in industrial automation applications, trouble-shooting fault detection microcode, software engineering for advanced signal processing applications, development and implementation of algorithms for finite-state controller design, design of disk head assembly fault diagnostics, development of expert systems for verification of design standards for PC board design and for component testability, documentation and analysis of BIOS software, development of training manuals, classical expert system design, software design recovery research in transportation engineering and expert system approaches to telephone system reliability, to name a few.

6. I have been engaged as an expert witness in numerous technology based matters for the past sixteen years, with a focus on patent infringement, trade secret misappropriation and copyright infringement. My cases have covered such diverse areas as machine vision, electronics packaging, data encryption, mainframe and

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