UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

KOSS CORPORATION,
Patent Owner.

CASE: IPR2021-00600
U.S. PATENT NO. 10,298,451

DECLARATION OF JOSEPH C. MCALEXANDER III

November 24, 2021

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1.   I, Joseph C. M<u>c</u>Alexander III, declare as follows:

2.   I have been retained by counsel for Koss Corp. ("Koss") as a technical expert in connection with the *inter partes* review ("IPR") proceeding identified above for U.S. Patent 10,298,451 (the "'451 Patent"). I submit this declaration in support of Koss's response to the petition.

I.   BACKGROUND AND QUALIFICATIONS

3.   I have a Bachelor of Science degree in Electrical Engineering from North Carolina State University and have studied neural science at the University of Texas Graduate School of Biomedical Sciences.

4.   Upon completion of my electrical engineering degree in 1969, I was commissioned as an officer in the U.S. Army. For 2 years, I managed the air defense operation for the New England area, which included radar and secure communication channels to aircraft, missile batteries, and U.S. Command. I then commanded a signal battalion in South Korea for one year, designing and orchestrating at the division level the first of its kind communication power grid mapping study using AM and FM transmission/reception, among others, and utilizing crypto security transmission/reception methods.

5.   I am a Registered Professional Engineer in the state of Texas (Reg. No. 79,454) and am a recognized inventor on thirty-one U.S. patents. I have forty-nine

years of professional experience, during which I designed and analyzed a variety of microcircuits, semiconductors, and control systems, amongst other technologies for Texas Instruments, Inc. and EPI Technologies, Inc. Specifically, I have designed Dynamic Random Access Memories ("DRAMs"), Static Random Access Memories ("SRAMs"), Charged Coupled Devices ("CCDs"), Shift Registers ("SRs"), and a variety of functional circuits, including input/output buffers for addresses and data transmission, decoders, clocks, sense amplifiers, fault tolerant memory, parallel-to-serial data paths for video applications, level shifters, converters, pumps, logic devices, wireless communication systems, and microelectromechanical systems ("MEMs"). I possess significant expertise in operations and manufacturing associated with these technologies, including a sophisticated knowledge of quality control, testing, reliability, and failure analyses.

6.   I have conducted high level instruction to design and process engineers and managers at Texas Instruments, among others, in Solid State Device Physics, Semiconductor Processing, Circuit Design Techniques, and Statistical Quality Control Methods. I have also instructed corporate audiences in Effectiveness Training, Japanese Manufacturing Techniques, and problem recognition and solution methods and tools.

7.   I have negotiated licenses for my intellectual property, which includes design programs to provide GPS tracking and transmission of information wirelessly via paging and CDMA. These technologies involved, among others, partnerships for skier tracking with Snowtrax, offender tracking with Stellar Technology Enterprises, pet tracking with The Procter & Gamble Company, journalist tracking with CNN, asset tracking with TrackDaddy, and family tracking with Disney. I also advised a startup between 2013 and 2018 in peer-to-peer encrypted cellular communication.

8.   I have provided consultancy services associated with the aforementioned technologies. My consulting career began with Cochran Consulting, Inc. in 1991. Currently, I am the President of McAlexander Sound, Inc. and the Managing Director of McAlexander Sound Pte Ltd., where I offer such consultancy services and serve as a Technical Advisor for highly-specialized matters. I provide expert witness services for the protection of intellectual property. As an expert witness, I have analyzed processes and designs associated with personal computers, peripheral computers, software, and wireless communications systems, including telephones, headsets, microprocessors, controllers, memories, programmable logic devices, and other consumer electronics.

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