UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PEAG LLC (d/b/a JLab Audio), AUDIO PARTNERSHIP LLC and AUDIO PARTNERSHIP PLC (d/b/a Cambridge Audio)

Petitioner

v.

VARTA MICROBATTERY GMBH, Patent Owner

Patent Nos. 9,153,835 9,496,581 9,799,913

9,799,858

IPRs

IPR2020-01211

IPR2020-01212

IPR2020-01213

IPR2020-01214

DECLARATION OF WILLIAM H. GARDNER



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I. <u>INTRODUCTION</u>

- My name is William H. Gardner. I am a Senior Director at 1. QuantumScape and the Chief Battery Cell Engineering Expert at InoBat Auto. I have been retained by Baker Botts L.L.P. ("Counsel") on behalf of PEAG LLC d/b/a JLab Audio, Audio Partnership LLC and Audio Partnership PLC d/b/a Cambridge Audio ("Petitioner") to provide technical assistance for the *inter partes* reviews of U.S. Patent No. 9,153,835 ("the '835 Patent"), U.S. Patent No. 9,799,913 ("the '913 Patent"), U.S. Patent No. 9,496,581 ("the '581 Patent"), and U.S. Patent No. 9,799,858 ("the '858 Patent") (collectively, the "challenged patents"). This declaration sets forth my opinions on issues related to patentability of claims 1–12 of the '835 Patent ("the '835 Patent Challenged Claims"), claims 1-12 of the '581 Patent ("the '581 Patent Challenged Claims"), claims 1–8 of the '913 Patent ("the '931 Patent challenged Claims'), and claims 1–8 of the '858 Patent ("the '858 Patent Challenged Claims") (collectively, the "challenged claims"). I provide technical bases for these opinions as appropriate.
- 2. This declaration contains statements of my opinions formed to date and the bases and reasons for those opinions. I make this declaration based upon my own personal knowledge and, if called upon to testify, would testify competently to the matters contained herein.



- 3. For my efforts on this declaration I have been compensated at my standard rate of \$425 per hour. My compensation is in no way contingent on the results of these or any other proceedings relating to the above-captioned patents.
- 4. I have summarized in this section my educational background, career history, publications, and other relevant qualifications. My full resume is attached as Ex. 1004 (Gardner Resume).
- 5. I am an expert in the field of battery design and manufacturing, including the internal and external structure of various types of batteries. I have worked in the field of battery manufacturing for over twenty years, where I have held various roles, including development and leadership positions.
- 6. I received my Bachelor of Science (B.S.) in Mechanical Engineering from Rutgers University in 1994.
- 7. After receiving my Bachelor's degree, I worked in industry as a product engineer at Duracell Inc. from 1994 through 1999. I then worked as an Engineering Manager at Double E Company from 1999 to 2005. Afterwards, I worked as a Senior Engineer in Product Development at Electrochem Commercial Power from 2005 to 2006. Between 2006 and 2013, I worked in various positions at A123 Systems, Inc., including positions as Senior Development Engineer, Director of Cell Product Development, and Director of Core Chemistry and Advanced Engineering.



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