UNITED STATES PATENT AND TRADEMARK OFFICE ————— BEFORE THE PATENT TRIAL AND APPEAL BOARD —————

APPLE INC.,

Petitioner,

V.

FIRSTFACE CO., LTD.,

Patent Owner.

Case IPR2019-01011

U.S. Patent No. 9,633,373

DECLARATION OF BENJAMIN B. BEDERSON



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I, Benjamin B. Bederson, declare as follows:

I. INTRODUCTION

1. My name is Benjamin B. Bederson. I am over the age of eighteen (18) and am competent to make this Declaration.

A. Engagement

- 2. I submit this report on behalf of Apple Inc. in connection with its request for *inter partes* review of U.S. Patent No. 9,633,373 ("the '373 patent")—to review and to provide my opinion on the scope and content of "prior art" predating the application for the '373 patent and regarding the subject matter recited in the claims of the '373 patent. I understand that this Declaration relates to a petition for the above-captioned *inter partes* review (IPR) of the '373 patent specifically addressing claims 10 and 18. Claims 10 and 18 depend from claims 1 and 11 of the '373 patent, for which I submitted my opinion in connection with an *inter partes* review petition filed earlier this year (IPR2019-00613). Because of this dependency, I repeat my opinion regarding the subject matter of claims 1 and 11 below.
- **3.** For my efforts in connection with the preparation of this declaration, I have been compensated at my standard hourly consulting rate of \$600. My compensation is in no way contingent on the results of these or any other proceedings relating to the above-captioned patent. I have no expectation or promise of additional business with the petitioner in exchange for the positions explained herein.



4. I make this declaration based on personal knowledge.

B. Background and Qualifications

- 5. A detailed description of my professional qualifications, including a listing of my specialties/expertise and professional activities, is contained in my curriculum vitae, a copy of which is attached as Appendix A. In what follows, I provide a short summary of my professional qualifications.
- 6. I received a Bachelor of Science degree in Computer Science with a minor in Electrical Engineering from Rensselaer Polytechnic Institute ("RPI") in 1986. I received a Master of Science degree and a Ph.D. in Computer Science from New York University ("NYU") in 1989 and 1992, respectively.
- 7. Since 1998, I have been a Professor of Computer Science at the University of Maryland ("UMD"), where I have joint appointments at the Institute for Advanced Computer Studies and the College of Information Studies (Maryland's "iSchool"), and am currently on leave. I was also Associate Provost of Learning Initiatives and Executive Director of the Teaching and Learning Transformation Center from 2014 to 2018. I am a member and previous director of the Human-Computer Interaction Lab ("HCIL"), the oldest and one of the best known Human-Computer Interaction research groups in the country. I was also co-founder and Chief Scientist of Zumobi, Inc. from 2006 to 2014, a Seattle-based startup that is a publisher of content applications and advertising platforms for smartphones. I am also co-founder and



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