#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Walter G. Mayfield, et al.

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Title: SYSTEM COMPRISING A PORTABLE SWITCHING

DEVICE FOR USE WITH A PORTABLE ELECTRONIC

**DEVICE** 

## **DECLARATION OF DR. JEREMY COOPERSTOCK**



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I, Jeremy Cooperstock, of Montreal, Canada, declare that:

### I. INTRODUCTION

- 1. I have been retained by Fish & Richardson, P.C., on behalf of Apple Inc. ("Petitioner"), as an independent expert consultant in this *inter partes* review ("IPR") proceeding before the United States Patent and Trademark Office ("PTO").
- 2. I have been asked by Petitioner's counsel ("Counsel") to consider whether certain references teach or suggest the features recited in Claims 1-5 and 7-13 of U.S. Patent No. 10,589,320 ("the '320 patent"). My opinions and the bases for my opinions are set forth below. My opinions are based on my education and experience.
- 3. In writing this Declaration, I have considered the following: my own knowledge and experience, including my teaching and work experience in the above fields; and my experience of working with others involved in those fields.
- 4. I have no financial interest in either party or in the outcome of this proceeding. I am being compensated for my work as an expert on an hourly basis, for all tasks involved. My compensation is not dependent on the outcome of these proceedings or on the content of my opinions.



## II. QUALIFICATIONS

- 5. I am a professor in the Department of Electrical and Computer

  Engineering at McGill University. My curriculum vitae is provided as Appendix A.
- 6. I received my B.Sc. in Electrical Engineering from the University of British Columbia, my M.Sc. in Computer Science from the University of Toronto in 1992, and my Ph.D. in Electrical and Computer Engineering from the University of Toronto in 1996.
- 7. I am a member of the Centre for Intelligent Machines, and a founding member of the Centre for Interdisciplinary Research in Music Media and Technology at McGill University. I also direct the Shared Reality Lab at McGill, which focuses on computer mediation to facilitate high-fidelity human communication and the synthesis of perceptually engaging, multimodal, immersive environments. I led the development of the Intelligent Classroom, the world's first Internet streaming demonstrations of Dolby Digital 5.1, multiple simultaneous streams of uncompressed high-definition video, a high-fidelity orchestra rehearsal simulator, a simulation environment that renders graphic, audio, and vibrotactile effects in response to footsteps, and a mobile game treatment for amblyopia.
- 8. My work on the Ultra-Videoconferencing system was recognized by an award for Most Innovative Use of New Technology from ACM/IEEE Supercomputing and a Distinction Award from the Audio Engineering Society.



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