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

GOOGLE INC. Petitioner

v.

KONINKLIJKE PHILIPS ELECTRONICS N.V. Patent Owner

U.S. PATENT NO. RE44,913 Case Nos. IPR2017-00386, IPR2017-00387

DECLARATION OF DR. ANDREW COCKBURN



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I, Dr. Andrew Cockburn, hereby state the following:

I. INTRODUCTION

- 1. I have been retained by Google Inc. ("Google") in connection with the filing of a Petition for *inter partes* review of U.S. Patent No. RE44,913 ("the '913 patent") (Ex. 1001). The opinions presented here are my own.
- 2. The claims of the '913 patent generally relate to a method of improved character input that employs a keypad that is capable of selecting both "primary" and "secondary" characters associated with particular keys. The method involves the use of a "short press" to select "primary" characters and the use of a "long press" to facilitate selections of secondary characters.
- 3. I have been asked to explain the bases for my opinions that claims 1-16 of the '913 patent are unpatentable because they are anticipated and/or would have been obvious to the person of ordinary skill in view of the prior art.
- 4. In reaching my opinions regarding the invalidity of these patent claims, I have relied on the documents cited herein, and I have relied as well on my decades of knowledge and experience in the field of Human-Computer Interaction ("HCI").
- 5. This declaration is based on information currently available to me. I reserve the right to supplement my opinions in response to arguments raised by Philips or in response to any additional information that becomes available to me.



II. BACKGROUND AND QUALIFICATIONS

- 6. I am a Professor at the Department of Computer Science and Software Engineering at the University of Canterbury, New Zealand. I also currently head the HCI (which stands for "Human-Computer Interaction") and Multi-Media research group at the University of Canterbury.
- 7. In 1988, I was awarded a Bachelor of Science with Honors in Computer Science from the University of York, England.
- 8. In 1993, I was awarded a Ph.D. from the University of Stirling,
 Scotland. My thesis was on "Computer Supported Cooperative Work" which
 relates to forms of group interaction supported on computer.
- 9. In 1993, I joined the University of Canterbury as a Lecturer in the Department of Computer Science (now the Department of Computer Science and Software Engineering). I was subsequently promoted to a Senior Lecturer, and then an Associate Professor, before my appointment as a Professor in 2010. I currently hold this title of Professor.
- 10. I have over 23 years' experience in the area of HCI. The field of HCI generally is concerned with ways of understanding and improving the interaction between humans and computers, with a view to understanding, evaluating, designing and building new styles of interactions that improve on one or more of



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