

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE INC.,  
Petitioner

v.

IMMERSION CORPORATION,  
Patent Owner

U.S. Patent No. 8,749,507

Filing Date: April 6, 2012

Issue Date: June 10, 2014

Title: Systems And Methods For Adaptive Interpretation Of  
Input From A Touch-Sensitive Input Device

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*Inter Partes* Review No.: (Unassigned)

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**DECLARATION OF DR. ANDY COCKBURN**

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## **I. INTRODUCTION**

1. I have been retained by counsel for Apple Inc. as an expert witness in the above-captioned proceeding. I have been asked to provide my opinion about the patentability of claims 1-5, 9-12 and 14-17 of U.S. Patent No. 8,749,507 (the “507 patent”).

2. I have been retained at my normal hourly rate of \$475 per hour. No part of my compensation is dependent upon the outcome of this investigation or the specifics of my testimony.

### **A. Background and Qualifications**

3. My curriculum vitae (“CV”) is attached as Appendix A. 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 (Human-Computer Interaction) and Multi-Media research group at the University of Canterbury.

4. In 1988, I was awarded a Bachelor of Science with Honors in Computer Science from the University of York, England.

5. 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 computers.

6. 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 the title of Professor.

7. I have over 20 years of experience in the area of HCI (Human-Computer Interaction). 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 the end goals of making computers faster to learn, more intuitive, more efficient to use, and more subjectively satisfying.

8. Throughout my career, I have published the results of many research projects that have involved building new user interfaces or reviewing existing user interfaces for performing a particular task, and evaluating their effectiveness. This includes publications relating to:

- (a) investigating user experiences with web navigation interfaces, for example when using the “back” button on web browsers;

- (b) reviewing and improving various interface schemes for traversing through documents in computer applications, including zooming, scrolling, and other techniques;
- (c) analyzing new interfaces for text entry on mobile and touch-sensitive devices;
- (d) addressing the problems arising from the small form factor of mobile devices with touch-sensitive displays;
- (e) examining the influence of haptic feedback on user performance with mouse and touchscreen input devices; and
- (f) evaluating the importance of spatially stable displays in user interfaces.

9. I also have extensive experience in designing and building new user interfaces and reviewing existing user interfaces. This includes a number of projects regarding the design, development and evaluation of user interfaces that I have undertaken with companies in the computing and HCI industry, such as:

- (a) working with Airbus SAS in 2016 on methods to assist pilot interaction with touchscreens in turbulent environments;

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