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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC. Petitioner

v.

VIRNETX INC. Patent Owner

Case IPR2015-00812 Patent 8,850,009

Declaration of Fabian Monrose, Ph.D.

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I, FABIAN MONROSE, declare as follows:

I. Introduction

I have been retained by VirnetX Inc. ("VirnetX") for this *inter partes* 1. review proceeding. I understand that this proceeding involves U.S. Patent No. 8,850,009 ("the '009 patent"). I understand the '009 patent is assigned to VirnetX and that it is part of a family of patents that stems from U.S. provisional application nos. 60/106,261 ("the '261 application"), filed on October 30, 1998, and 60/137,704 ("the '704 application"), filed on June 7, 1999. I understand that the '009 patent is a continuation of U.S. application no. 13/903,788 filed May 28, 2013 ("the '788 application"), which is a continuation of U.S. application no. 13/336,790 filed December 23, 2011 (now U.S. Patent No. 8,458,341, "the '341 patent"), which is a continuation of U.S. application no. 13/049,552 filed March 16, 2011 ("the '552 application), which is a continuation of U.S. application no. 11/840,560 filed August 17, 2007 (now U.S. Patent No. 7,921,211, "the '211 patent"), which is a continuation of U.S. application no. 10/714,849 filed November 18, 2003 (now U.S. Patent No. 7,418,504 ("the '504 patent), which is a continuation of U.S. application no. 09/558,210 filed April 26, 2000 ("the '210 application," abandoned). And I understand the '210 application is a continuationin-part of U.S. application no. 09/504,783 filed February 15, 2000 (now U.S. Patent 6,502,135, "the '135 patent"), and that the '135 patent is a continuation-inpart of U.S. application no. 09/429,643 (now U.S. Patent No. 7,010,604) filed October 29, 1999, which claims priority to the '261 and '704 applications.

II. Resources Consulted

2. I have reviewed the '009 patent, including claims 1-8, 10-20, and 22-25. I have also reviewed the Petition for *Inter Partes* Review (Paper No. 1) filed with the U.S. Patent and Trademark Office ("Office") by Apple Inc. on March 2, 2015 (Paper No. 1, the "Petition"). I have also reviewed the Patent Trial and Appeal Board's ("Board") decision to institute *inter partes* review (Paper No. 8, the "Decision") of September 11, 2015.

3. I understand that in this proceeding the Board instituted review of the '009 patent on one ground: obviousness of claims 1-8, 10-20, and 22-25 over *Beser* and RFC 2401. I have reviewed the exhibits and other documentation supporting the Petition that are relevant to the Decision and the instituted grounds, and any other material that I reference in this declaration.

III. Background and Qualifications

4. I have a great deal of experience and familiarity with computer and network security, and have been working in this field since 1993 when I entered the Ph.D. program at New York University.

5. I am currently a Professor of Computer Science at the University of North Carolina at Chapel Hill. I also hold an appointment as the Director of

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