

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

MPH TECHNOLOGIES OY,
Patent Owner

Case IPR2019-00821
U.S. Patent No. 8,037,302

DECLARATION OF DAVID GOLDSCHLAG, PH.D.

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I, David Goldschlag, Ph.D., declare as follows:

1. I have been retained on behalf of Apple, Inc. for the above-captioned *inter partes* review proceeding. I understand that this proceeding involves U.S. Patent No. 8,037,302 (“the ’302 patent”), titled “Method and System for Ensuring Secure Forwarding of Messages,” and that the ’302 patent is currently assigned to Mobility Patent Holding MPH Oy.

2. I have reviewed and am familiar with the specification of the ’302 patent issued on October 11, 2011. I will cite to the specification using the following format: Ex. 1001, ’302 patent, 1:1-10. This example citation points to the ’302 patent specification at column 1, lines 1-10, which is being provided as Exhibit 1001.

3. I have reviewed and am familiar with the following prior art used in the Petition for *Inter Partes* Review of the ’302 patent:

- **PCT Patent Publication No. WO 01/54379 to Ahonen** (“Ahonen”). Ahonen is provided as Ex. 1004.
- **U.S. Patent No. 6,904,466 to Ishiyama et al.** (“Ishiyama”). Ishiyama is provided as Ex. 1005.
- **“Complete Computing,” by Gupta et al.** (“Gupta”). Gupta is provided as Ex. 1006.

4. I am familiar with the technology-at-issue as of the September 2001 timeframe.

5. To the best of my knowledge, the above-mentioned documents and materials are true and accurate copies of what they purport to be. An expert in the field would reasonably rely on them to formulate opinions such as those set forth in this declaration.

6. I understand that Gupta was originally presented as part of the Second International Conference for Worldwide Computing and Its Applications (WWCA '98) held in Tsukuba, Japan on March 4-5, 1998. *See* Ex. 1006, Gupta, 0001; *see also* Ex. 1013, Mullins Decl., ¶¶45-47, Attachment 1A. Conferences such as WWCA '98 were typically open to the interested public, and I have no reason to believe otherwise in this case. The papers presented at the conference would typically be published in conference proceedings and distributed to attendees of the workshop without restriction.

7. I have been asked to provide my technical review, analysis, insights, and opinions regarding the above-noted references that form the basis for the grounds of rejection set forth in the Petition for *Inter Partes* Review of the U.S. Patent No. 8,037,302.

I. Qualifications

8. My qualifications are stated more fully in my curriculum vitae, attached as Exhibit 1009. Here, I provide a brief summary of my qualifications:

9. I have extensive education and work experience in the field of computer security. I received a B.S. degree in Computer Science from Wayne State University in 1985, then received a Ph.D. degree in Computer Science from the University of Texas at Austin in 1992. In my Ph.D. program, I studied formal methods and automated theorem proving. My Ph.D. thesis focused on methodologies for increasing the confidence one may have that computer systems behave as desired, including functionality, security, and safety.

10. I have conducted significant research and published significant papers in the field of computer security. For example, I have published 34 papers in the field of computer security, including papers on verification of computer programs, verification of computer hardware, novel techniques for smartcard security for cable and satellite TV systems, techniques for privacy in electronic transactions, techniques for secure lotteries that do not depend on the trustworthiness of the lottery operator, and several papers on Onion Routing. Onion Routing, now called Tor, is a system for privacy and anonymity on the internet. I and my co-inventors

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