

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.

MPH TECHNOLOGIES OY,  
Patent Owner

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Case IPR2019-00820  
Patent No. 7,937,581

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**DECLARATION OF DAVID GOLDSCHLAG, PH.D., IN SUPPORT OF  
PETITIONER'S REPLY TO THE PATENT OWNER RESPONSE**

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Patent Trial and Appeal Board  
U.S. Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Apple EX1022

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

**I. Introduction**

1. I am the same David Goldschlag, Ph.D. who submitted a prior declaration (EX1002) in this matter, which I understand was filed on March 27, 2019. I have been retained on behalf of Apple Inc. (“Petitioner”) for the above-captioned *inter partes* review proceeding.

2. My background and qualifications were provided in paragraphs 6-12 of my prior declaration, and my CV was provided as EX1016. My statements in paragraphs 2-5 of my prior declaration regarding my review of U.S. Patent No. 7,937,581 (“the ’581 patent”) and related materials remain unchanged, as do my understandings of the relevant legal principles stated in paragraphs 13-21.

3. Since my prior declaration, I have reviewed and considered the following additional materials:

Paper	Description
10	Decision Granting Institution, IPR2019-00820 (“DI”)
23	Replacement Patent Owner’s Response

Exhibit	Description
1021	Deposition Transcript of George N. Rouskas, Ph.D., dated March 20, 2020.
2009	Declaration of Professor George N. Rouskas, Ph.D.

4. I have also considered all other materials cited herein. My work on this case is being billed at my normal hourly rate, with reimbursement for actual expenses. My compensation is not contingent upon the outcome of this *inter partes* review proceeding.

## II. Claim Construction

5. Dr. Rouskas contends that the term “security gateway” should be construed as a “gateway that provides additional security functionality, such as firewall functionality.” EX2009, Rouskas Decl., ¶64. Dr. Rouskas further contends that a “gateway” is “an intermediary system with two or more communication interfaces that interconnects different networks and can forward packets it receives from one network on to another network.” *Id.* I disagree that the term “security gateway” needs additional construction, and I further disagree with the definition provided by Dr. Rouskas.

6. Dr. Rouskas appears to propose this construction in an attempt to distinguish a “security gateway” from a “host.” But as admitted by Dr. Rouskas and well-known in the art, “[p]ersons of ordinary skill in the art [POSITA] recognize that devices can perform multiple functions.” *Id.*, ¶69. Dr. Rouskas further acknowledges that “the same device that otherwise performs a security gateway function may in some cases be the end destination for traffic...” *Id.*, ¶70.

This understanding is consistent with my own and indicates the artificial distinction between the words “security gateway” and “host.”

7. I agree with Dr. Rouskas, as he admitted during his deposition, that the '810 patent (and therefore the '581 patent) uses the term “security gateway” in its common form as well-understood in the art and as described in RFC 2401—the IPsec specification. EX1021, Rouskas Depo., 165:17-166:5; 168:9-20. There is thus no dispute that the '581 patent uses the term “security gateway” in its well-known and conventional manner. Accordingly, in view of the '581 patent, a POSITA would not have needed to construe the term “security gateway” because the '581 patent does not use the term in any atypical or special manner.

8. The '581 patent itself also supports this interpretation. For example, Dr. Rouskas quotes the following passage from the '581 patent, which I have further extended and emphasized below:

Typically, transport mode is used for end-to-end communication between two hosts...[T]unnel mode may also be used for end-to-end communication between two hosts. Tunnel mode is often used when one or both ends of a SA is *a security gateway, such as a firewall or a router* that implements IPsec....The IPsec tunnel mode operates e.g. in such a way that if a host on a network generates an IP packet with a destination address of another host on another network, the packet is routed from the originating host to a security gateway (SGW), firewall or other secure router at the boundary of the first

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