UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD APPLE INC., Petitioner v. MPH TECHNOLOGIES OY, Patent Owner

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

Case IPR2019-00819 Patent No. 7,620,810

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



TABLE OF CONTENTS

I.	Introduction	
II.	Claim Construction	
III.	The Combination of Ishiyama and Murakawa Discloses the Claimed "Security Gateway."	6
Α	A. It would have been obvious to a POSITA from Ishiyama's use of IPSec for its correspondent host to be a security gateway because IPSec only has a finite number of endpoint configurations	7
В	3. Ishiyama's use of tunnel mode suggests that its correspondent host can be a security gateway.	12
C	C. A POSITA Would Have Sought Out References Such as Murakawa for its Teaching of a Tunnel Mode Implementation	15
IV.	Nothing in the Prior Art Precludes Ishiyama's "Correspondent Host" from Operating as a "Security Gateway."	19
V.	The Combination of Ishiyama and Murakawa Teaches the "Other Terminal."	24
VI.	Ishiyama Teaches the Mobile Terminal Transmitting a Message While at a Second Address to Change the Definition of a Security Association.	30
VII.	The Combination of Ishiyama and Murakawa Teaches the "Request"/"Reply" Messages Being Encrypted	33
VIII.	The Combination of Ishiyama, Murakawa, and Ahonen Renders Claims 2-3 Obvious.	34
IX	Conclusion	40



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. 7,620,810 ("the '810 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, IPR2019-00819 ("DI")
23	Replacement Patent Owner's Response

Exhibit	Description
1019	Deposition Transcript of George N. Rouskas, Ph.D., dated March 20, 2020.
2003	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." EX2003, 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 uses the term "security gateway" in its common form as well-understood in the art and as described in RFC 2401—the IPSec specification.

 EX1019, Rouskas Depo., 165:17-166:5; 168:9-20. There is thus no dispute that the '810 patent uses the term "security gateway" in its well-known and conventional manner. Accordingly, in view of the '810 patent, a POSITA would not have needed to construe the term "security gateway" because the '810 patent does not use the term in any atypical or special manner.
- 8. The '810 patent itself also supports this interpretation. For example, Dr. Rouskas quotes the following passage from the '810 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



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

