UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____

AKAMAI TECHNOLOGIES, INC.,
Petitioner,

v.

LIMELIGHT NETWORKS, INC.,
Patent Owner.

_____
Case IPR2017-00348

Patent 8,750,155

_____

DECLARATION OF KEVIN C. ALMEROTH, PH.D.

TABLE OF CONTENTS

I, Kevin Almeroth, Ph.D., declare as follows:

I. BACKGROUND AND QUALIFICATIONS

1.   I have been retained by Greenberg Traurig, LLP, on behalf of Limelight Networks, Inc. ("Limelight"), as an expert in the above-captioned proceeding. I have been asked to render an opinion regarding the validity of claims 1, 8, and 13 ("Challenged Claims") of U.S. Patent No. 8,750,155 ("the '155 Patent"; Ex. 1001). I am being compensated at a rate of $600.00 per hour for my study and testimony in this matter. I am also being reimbursed for reasonable and customary expenses associated with my work and testimony in this matter. My compensation is not contingent on the outcome of this matter or the specifics of my testimony.

2.   I submit this declaration based on my personal knowledge and in support of Limelight's preliminary response ("Preliminary Response") to Akamai Technology, Inc.'s ("Akamai's") *inter partes* review petition ("Petition") regarding the '155 Patent.

3.   My name is Kevin C. Almeroth. I am currently a Professor in the Department of Computer Science at the University of California, Santa Barbara. I also hold an appointment and am a founding member of the Computer Engineering (CE) Program. I am a founding member of the Media Arts and Technology (MAT) Program, and the Technology Management Program (TMP). I also served as the Associate Director of the Center for Information Technology and Society

(CITS) from 1999 to 2012. I have been a faculty member at UCSB since July 1997.

4.   I hold three degrees from the Georgia Institute of Technology: (1) a Bachelor of Science degree in Information and Computer Science (with minors in Economics, Technical Communication, and American Literature) earned in June, 1992; (2) a Master of Science degree in Computer Science (with specialization in Networking and Systems) earned in June, 1994; and (3) a Doctor of Philosophy (Ph.D.) degree in Computer Science (Dissertation Title: Networking and System Support for the Efficient, Scalable Delivery of Services in Interactive Multimedia System, minor in Telecommunications Public Policy) earned in June, 1997.

5.   One of the major themes of my research has been the delivery of multimedia content and data between computing devices and users. In my research I have looked at large-scale content delivery systems and the use of servers located in a variety of geographic locations to provide scalable delivery to hundreds, even thousands, of users simultaneously. I have also looked at smaller-scale content delivery systems in which content, including interactive communication like voice and video data, is exchanged between computers and portable computing devices. As a broad theme, my work has examined how to exchange content more efficiently across computer networks, including the devices that switch and route data traffic. More specific topics include the scalable delivery of content to many

users, mobile computing, satellite networking, delivering content to mobile devices, and network support for data delivery in wireless and sensor networks.

6.   Beginning in 1992, at the time I started graduate school, the initial focus of my research was the provision of interactive functions (e.g., VCR-style functions like pause, rewind, and fast-forward) for near video-on-demand systems in cable systems, in particular, how to aggregate requests for movies at a cable head-end and then how to satisfy a multitude of requests using one audio/video stream to broadcast to multiple receivers simultaneously. Continued evolution of this research has resulted in the development of new techniques to scalably deliver on-demand content, including audio, video, web documents, and other types of data, through the Internet and over other types of networks, including over cable systems, broadband telephone lines, and satellite links.

7.   An important component of my research from the very beginning has been investigating the challenges of communicating multimedia content between computers and across networks. Although the early Internet was used mostly for text-based non-real time applications, the interest in sharing multimedia content quickly developed. Multimedia-based applications ranged from downloading content to a device to streaming multimedia content to be instantly used. One of the challenges was that multimedia content is typically larger than text only content, but there are also opportunities to use different delivery techniques since

DOCKET ALARM

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.