UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Juniper Networks, Inc. & Palo Alto Networks, Inc.,
Petitioners,

v.

Packet Intelligence LLC,
Patent Owner.

In re *Inter Partes* Review of:
U.S. Patent No. 6,651,099; 6,665,725; 6,771,646; 6,839,751; and 6,954,789

DECLARATION OF KEVIN C. ALMEROTH, PH.D.

TABLE OF CONTENTS

I, Kevin C. Almeroth, declare as follows:

I. Introduction

1.   My name is Kevin C. Almeroth. I have been retained by Heim, Payne & Chorush LLP, on behalf of Packet Intelligence LLC, and I am submitting this declaration to offer my independent expert opinion concerning certain issues raised in the seven co-pending Petitions for Inter Partes Review ("Petition") regarding five related patents. Specifically, Petitioners filed seven (7) IPR Petitions: (1) IPR2020-00335 concerning U.S. Patent No. 6,651,099, (2) IPR2020-00336 concerning U.S. Patent No. 6,665,725, (3) IPR2020-00337 concerning U.S. Patent No. 6,771,646, (4) IPR2020-00338 concerning U.S. Patent No. 6,839,751, (5) IPR2020-00339 concerning U.S. Patent No. 6,954,789, (6) IPR2020-00485 concerning U.S. Patent No. 6,651,099, and (7) IPR2020-00486 concerning U.S. Patent No. 6,954,789 (collectively, the "Asserted IPRs" and "Challenged Patents", respectively).

II. Background and Qualifications

2.   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, 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.

3. 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.

4. Beginning in 1992, when I started graduate school, the focus of my research was on the provision of interactive functions (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 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.

5.   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 designed 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 multimedia content is more resilient to errors. I have worked on a variety of research problems and used a number of systems that were developed to deliver multimedia content to users.

6.   In 1994, I began to research issues associated with the development and deployment of a one-to-many communication facility (called "multicast") in the Internet (first deployed as the Multicast Backbone, a virtual overlay network supporting one-to-many communication). Some of my more recent research endeavors have looked at how to use the scalability offered by multicast to provide streaming media support for complex applications like distance learning, distributed collaboration, distributed games, and large-scale wireless communication. Multicast has also been used as the delivery mechanism in systems that perform local filtering (i.e., sending the same content to a large number of users and allowing them to filter locally content in which they are not interested).

7.   Starting in 1997, I worked on a project to integrate the streaming media capabilities of the Internet together with the interactivity of the web. I developed a

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.

fastcase
Smarter legal research.