UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BROADCOM CORPORATION
Petitioner

v.

TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
Patent Owner

Case IPR2013-00636
Patent 6,424,625
Title: Method and Apparatus For Discarding Packets In A Data Network Having Automatic Repeat Request

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DECLARATION OF ROBERT AKL, D.Sc.,
IN SUPPORT OF PATENT OWNER'S MOTION TO AMEND

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DECLARATION BY ROBERT AKL, D.Sc., IN SUPPORT OF PATENT OWNER'S MOTION TO AMEND

I, Robert Akl, D.Sc., hereby declare, affirm, and state the following:

INTRODUCTION

1. The facts set forth below are known to me personally and I have firsthand knowledge of them. I am a U.S. citizen over eighteen years of age. I am fully competent to testify as to the matters addressed in this Declaration. I understand that this Declaration is being submitted along with Patent Owner's Motion to Amend the '625 Patent in response to the March 10, 2014 institution of Inter Partes Review of US Patent No. 6,442,625 (hereinafter, "the '625 Patent") by the United States Patent and Trademark Office ("USPTO") in IPR No. 2013-00636.

2. I was asked to give my opinion on whether the proposed substitute claim 20 of the '625 Patent valid over the known prior art. As described further below, it is my opinion that substitute claim 20 is valid over the known prior art. It is my further opinion that claim 20 is not anticipated or obvious in view of the known prior art.

QUALIFICATIONS AND COMPENSATION

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3. My resume, including my qualifications, a list of the publications that I have authored during my technical career, and a list of the cases in which, during the previous four years, I have testified as an expert at trial or by deposition, is attached to this declaration as Attachment A.

4. I have summarized in this section my educational background, career history, and other relevant qualifications. A true and accurate copy of my curriculum vitae is attached hereto as Attachment A.

5. I earned my Bachelor of Science degrees in Electrical Engineering and Computer Science summa cum laude with a ranking of first in my undergraduate class from Washington University in Saint Louis in 1994. In 1996 I earned my Master of Science degree in Electrical Engineering from Washington University in Saint Louis. I earned my Doctorate of Science in Electrical Engineering from Washington University in Saint Louis in 2000, with my dissertation on "Cell Design to Maximize Capacity in Cellular Code Division Multiple Access (CDMA) Networks."

6. After obtaining my Doctorate of Science degree, I worked as a Senior Systems Engineer at Comspace Corporation from October of 2000 to December of 2001. In this position, I designed, coded in MATLAB, and simulated Viterbi decoding, Turbo coding, trellis coded modulation (TCM), and Reed-Muller codes.

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This work further entailed the optimization of soft decision parameters and interleavers for additive white Gaussian and Rayleigh faded channels.

7. In January of 2002, I joined the faculty of the University of New Orleans in Louisiana as an Assistant Professor in the Department of Electrical Engineering. While on this faculty, I designed and taught two new courses called "Computer Systems Design I and II." I also developed a Computer Engineering Curriculum with strong hardware-design emphasis, formed a wireless research group, and advised graduate and undergraduate students.

8. In September of 2002, I received an appointment as an Assistant Professor in the Department of Computer Science and Engineering at the University of North Texas, in Denton, Texas. In May of 2008, I became a tenured Associate Professor in the Department of Computer Science and Engineering, where I continue to focus my research on wireless communication, including 4G, LTE, and wireless sensor networks. I also teach communications systems and wireless communication courses.

9. I have authored and co-authored approximately 65 journal publications, conference proceedings, technical articles, technical papers, book chapters, and technical presentations, in a broad array of communications-related technology, including networking and wireless communication. I have also developed and taught over 70 courses related to communications and computer

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system designs, including a number of courses on wireless communication, communications systems, computer systems design, and computer architecture. These courses have included introductory courses on communication systems and sensor networks, as well as more advanced courses on wireless communications. A complete list of my publications and the courses I have developed and/or taught is also contained in my curriculum vitae.

10. I hereby incorporate into this declaration the entire contents of my *curriculum vitae*, attached as Attachment A to this declaration.

11. I am being compensated at the rate of $550 per hour for my work in connection with this matter. My compensation is not dependent in any way on the contents of this Declaration, the substance of any further opinions or testimony that I may provide, or the ultimate outcome of this matter.

MATERIALS CONSIDERED

12. In forming the opinions expressed herein, I have reviewed and considered the following materials:

A. Petition for Inter Partes Review of U.S. Patent No. 6,424,625 Under 35 U.S.C. §312 and 37 C.F.R. §§42.104 (Paper No. 3) ("Petition");

B. U.S. Patent No. 6,424,625 (Petitioner's Exhibit No. 1001) and its file history;

C. U.S. Patent No. 5,610,595 to Gary W. Garrabrant, Jay C. Cho, and Joseph T. Savarese (Petitioner's Exhibit No. 1002) ("Garrabrant");

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