

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Aldana et al.
U.S. Pat. No.: 8,416,862 Attorney Docket No.: 50095-0050IP1
Issue Date: April 9, 2013
Appl. Serial No.: 11/237,341
Filing Date: September 28, 2005
Title: EFFICIENT FEEDBACK OF CHANNEL INFORMATION IN
A CLOSED LOOP BEAMFORMING WIRELESS
COMMUNICATION SYSTEM

DECLARATION OF JONATHAN WELLS, Ph.D.

TABLE OF CONTENTS

I.	ASSIGNMENT	4
II.	QUALIFICATIONS	4
III.	LEGAL PRINCIPLES	9
A.	Anticipation.....	9
B.	Obviousness	10
C.	Claim Construction	11
IV.	PERSON OF ORDINARY SKILL IN THE ART	14
V.	MATERIALS CONSIDERED	15
VI.	BACKGROUND OF THE '862 PATENT.....	18
A.	Subject Matter Overview	18
B.	File History of the '862 Patent.....	28
C.	Priority Date of the '862 Patent	31
D.	Background Knowledge of Matrices and their Singular Value Decomposition (SVD).....	32
VII.	OVERVIEW OF CONCLUSIONS FORMED AND PRIOR ART REFERENCES	34
VIII.	ANALYSIS OF LI '748 IN VIEW OF TONG AND MAO	35
IX.	ANALYSIS OF TONG IN VIEW OF MAO	78
X.	ANALYSIS OF LI '054 IN VIEW OF MAO	103
XI.	ANALYSIS OF LI '054 IN VIEW OF MAO AND YANG.....	135
XII.	ANALYSIS OF POON IN VIEW OF MAO	141

XIII. SUPPORT FOR TONG IN EARLIER-FILED PROVISIONAL APPLICATION	166
XIV. CONTINUED ANALYSIS OF LI '748 IN VIEW OF TONG AND MAO .	169
XV. CONTINUED ANALYSIS OF TONG AND MAO	170
XVI. CONTINUED ANALYSIS OF LI '054 AND MAO	171
XVII. CONTINUED ANALYSIS OF POON AND MAO	172
XVIII. ADDITIONAL REMARKS	174

I, Jonathan Wells, Ph.D., of Pleasanton, California, declare that:

I. ASSIGNMENT

1. I have been retained as a technical expert by counsel on behalf of Apple Inc. (“Apple” or “Petitioner”). I understand that Apple is requesting that the Patent Trial and Appeal Board (“PTAB” or “Board”) institute an *inter partes* review (“IPR”) proceeding of U.S. Patent No. 8,416,862 (“the ’862 patent”) (EX1001).

2. I have been asked to provide my independent analysis of the ’862 patent in light of the prior art publications cited below.

3. I am not, and never have been, an employee of Apple. I received no compensation for this declaration beyond my normal hourly compensation based on my time actually spent analyzing the ’862 patent, the prior art publications cited below, and the issues related thereto, and I will not receive any added compensation based on the outcome of any IPR or other proceeding involving the ’862 patent.

II. QUALIFICATIONS

4. I received a B.Sc. in Physics with Physical Electronics, awarded with first class honors, from the University of Bath in Bath, United Kingdom, in 1987. In 1991, I earned my Ph.D., also from the University of Bath. I earned my M.B.A., awarded with distinction, from Massey University in New Zealand, in 1998.

5. I have over 30 years of wireless communications experience in areas including cellular technologies, wireless devices, network infrastructure, and wireless rules and regulations. I have written a textbook and multiple industry reports and journal/conference papers which focus on wireless communications systems. For example, I am the author of “*Multi-Gigabit Microwave and Millimeter-Wave Wireless Communications,*” published by Artech House in 2010. I have also authored four comprehensive industry reports on cellular connectivity for Mobile Experts. I have lectured as part of undergraduate programs at University of California, Berkeley, Carnegie Mellon University, and University of Bath, and have given over two dozen lectures and conference presentations on topics germane to wireless communications. I am also a listed inventor of several patents, and am an author of over 40 academic and commercial publications and presentations. I have been a member of the Institute of Electrical and Electronic Engineers (IEEE) since 1995 and was elected as a Senior Member in 1999. This year I was recognized by the IEEE Santa Clara Valley Section, one of the largest IEEE Sections in the world, as their 2019 “Outstanding Engineer.” This was awarded “For his acknowledged expertise in the field of wireless communications and wireless technology, for his willingness to mentor others in the field, and for his work in the development of the next generation of creative and innovative technical products.”

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