

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

UNILOC LUXEMBOURG S.A.
Patent Owner

Case No. IPR2018-424
U.S. PATENT NO. 7,881,902

DECLARATION OF WILLIAM C. EASTTOM II (CHUCK EASTTOM)

TABLE OF CONTENTS

I.	INTRODUCTION.....	3
II.	BACKGROUND AND QUALIFICATIONS	3
III.	CLAIM CONSTRUCTION.....	4
IV.	THE '902 PATENT	4
V.	ONE OF ORDINARY SKILL IN THE ART	5
VI.	GENERAL ISSUES	6
	A. Mitchinick.....	6
	B. Sheldon	8
	C. Combining Mitchinick and Sheldon	8
	D. Combining Tanenhaus with Mitchinick or Sheldon	11
VII.	SPECIFIC CLAIM ELEMENTS.....	13
	A. Claim 1 detecting motion by an inertial sensor included in a mobile device. 13	
	B. Claim 1: determining, by the mobile device, whether the motion has a motion signature indicative of a user activity that the mobile device is configured to monitor.....	15
	C. Claim 5 “using a default step cadence window to identify a time frame within which to monitor for a next step; and”	16
VIII.	CONCLUSIONS.....	17
IX.	APPENDIX A – EASTTOM CV.....	18
	A. Education	18
	1. University Degrees	18
	2. Industry Certifications.....	19
	3. Security and Forensics Related Certifications.....	20
	4. Software Certifications	21
	5. Licenses.....	21
	B. Publications.....	21

1. Books	21
2. Papers, presentations, & articles.....	23
C. Patents	25
D. Standards and Certification Creation.....	26
E. Professional Awards and Memberships	26
F. Speaking Engagements	27
G. Litigation Support Experience.....	30
1. Testifying Experience	35
H. Professional Experience	37
I. Continuing Professional Education	40
J. References to my work.....	42
1. Media References	42
2. References to publications	42
3. Universities using my books	48
K. Training	50
L. Technical Skills	51

I. INTRODUCTION

1. I have been retained by Uniloc to provide my expert opinions regarding validity of U.S. Patent No. 7,881,902 ("902 Patent"). Specifically, I have been asked to provide expert opinions regarding Claims 1-3, 5-7, and 10-18.

2. I am being compensated for my time at my standard consulting rate of \$300 per hour. I am also being reimbursed for expenses that I incur during the course of this work. My compensation is not contingent upon the results of my study or the substance of my opinions.

II. BACKGROUND AND QUALIFICATIONS

3. I have 25+ years of experience in the computer science industry including extensive experience with computer security, computer programming, and computer networking. I have authored 26 computer science books, including textbooks used at universities around the world. I hold 42 different computer industry certifications, including many in networking subjects. I am experienced with multiple programming languages. I also have extensive experience in computer networking. I have extensive experience with mobile devices, including all aspects of mobile devices (hardware and software). I am a Distinguished Speaker for the Association of Computing Machinery (ACM), and a reviewer for the IEEE Security and Privacy journal, as well as a reviewer for the International Journal of Cyber Warfare and Terrorism (IJCWT). My CV is attached as appendix A.

III. CLAIM CONSTRUCTION

4. For the purposes of an IPR, claim terms are given their broadest reasonable meaning.

5. The petitioner has adopted the definitions of *dominant axis* as “the axis most influenced by gravity.”

6. The petitioner has adopted the definition of *cadence window* as “a window of time since a last step was counted that is looked at to detect a new step.”

7. The petitioner has adopted the definition of *a dominant axis logic to determine an orientation of a device with respect to gravity, to assign a dominant axis, and to update the dominant axis when the orientation of the device changes* as “hardware, software, or both to determine an orientation of a device, to assign a dominant axis, and to update the dominant axis as the orientation of the device changes.” The petitioner seems to ignore the fact that software, by itself, cannot determine a dominant axis. Hardware with software/firmware, can.

8. While the petitioner has made some claims in claim construction that ignore the actual functionality of the hardware and software involved, for the purposes of this proceeding I will use the petitioners adopted definitions in performing my analysis and forming my opinions.

IV. THE '902 PATENT

9. The '902 patent is titled “Human activity monitoring device.” The '902 patent issued February 1, 2011, from U.S. Patent Application No. 12/694,135 filed January

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