

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. IPR2018-0389  
U.S. PATENT NO. 8,712,723

**DECLARATION OF WILLIAM C. EASTTOM II (CHUCK EASTTOM)**

Apple v. Uniloc, IPR2018-0389  
Uniloc's Exhibit 2001

## TABLE OF CONTENTS

I.	INTRODUCTION.....	3
II.	BACKGROUND AND QUALIFICATIONS .....	3
III.	CLAIM CONSTRUCTION.....	4
IV.	THE '723 PATENT .....	5
V.	ONE OF ORDINARY SKILL IN THE ART .....	5
VI.	GENERAL ISSUES .....	6
VII.	SPECIFIC CLAIM ELEMENTS.....	10
	A. Claim 1.....	10
	B. Claim 2.....	11
	C. Claim 6.....	12
	D. Claim 10 .....	13
VIII.	CONCLUSIONS.....	13
IX.	APPENDIX A – EASTTOM CV.....	14
	A. Education .....	14
	1. University Degrees.....	14
	2. Industry Certifications.....	14
	3. Security and Forensics Related Certifications.....	16
	4. Software Certifications .....	16
	5. Licenses.....	17
	B. Publications.....	17
	1. Books	17
	2. Papers, presentations, & articles.....	18
	C. Patents .....	20
	D. Standards and Certification Creation.....	21
	E. Professional Awards and Memberships .....	22

F. Speaking Engagements .....	23
G. Litigation Support Experience.....	25
1. Testifying Experience .....	30
H. Professional Experience .....	32
I. Continuing Professional Education .....	36
J. References to my work .....	37
1. Media References .....	37
2. References to publications .....	38
3. Universities using my books .....	43
K. Training .....	45
L. Technical Skills .....	46

## **I. INTRODUCTION**

1. I have been retained by Uniloc to provide my expert opinions regarding validity of U.S. Patent No. 8,712,723 ("723 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. The petitioner has adopted the definition of *a counting logic to count periodic human motions by monitoring accelerations relative to the dominant axis by counting the periodic human motions when accelerations showing a motion cycle that meets motion criteria is detected within a cadence window* as “hardware, software, or both to count periodic human motions by monitoring accelerations relative to the dominant axis by counting the periodic human motions when accelerations showing a motion cycle that meets motion criteria is detected within a cadence window.” The

# 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.