UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
SAMSUNG ELECTRONICS AMERICA, INC. Petitioner
V.
UNILOC LUXEMBOURG, S.A. Patent Owner
IPR2018-01664
Patent No. 8,872,646

DECLARATION OF DR. IRFAN ESSA IN SUPPORT OF PETITIONER'S OPPOSITION TO PATENT OWNER'S MOTION TO AMEND



TABLE OF CONTENTS

1.	INTRODUCTION			
II.	MATERIALS REVIEWED			
III.	PERSON OF ORDINARY SKILL IN THE ART			
IV.	TECHNOLOGICAL BACKGROUND			
V.	SUBSTITUTE CLAIM 23			
VI.	SUBSTITUTE CLAIM 23 IS NOT SUPPORTED BY THE ORIGINALLY FILED DISCLOSURE OF THE '622 PATENT			
VII.	CLAIM CONSTRUCTION			
	A.	"glitch"	11	
	B.	"motion data"	11	
	C.	"a change in the dominant axis"	12	
	D.	"dominate axis logic to determine an idle sample value"	12	
	E.	"power logic to move the device from the inactive state to an active state upon detection of a change in the dominant axis which is the axis experiencing the largest effect of gravity"	13	
	F.	"device state logic to restore the device to one of: a last active state, a preset customized state"	14	
VIII.	OVERVIEW OF THE PRIOR ART			
	A.	U.S. Patent Application Pub. No. 2007/0268246 ("Hyatt") (Ex. 1017)	15	
	B.	U.S. Patent No. 7,180,502 ("Marvit") (Ex. 1015)	18	
	C.	U.S. Patent No. 7,463,997 ("Fabio") (Ex. 1016)	21	
IX.		PRIOR ART DISCLOSES OR SUGGESTS ALL OF THE FURES OF SUBSTITUTE CLAIM 23	21	



	A.	McMahan Discloses "the One or More Glitches Each Indicating a Respective Detected Motion That is Both Within an Operational Range of the Motion Sensor and Outside an Acceptable Range"	22
	В.	Hyatt Also Discloses "the One or More Glitches Each Indicating a Respective Detected Motion That is Both Within an Operational Range of the Motion Sensor and Outside an Acceptable Range"	25
	C.	McMahan Discloses "the Motion Data Containing Less Data as a Result of the Removal of the One or More Glitches from the Motion Data"	30
	D.	Hyatt Also Discloses "the Motion Data Containing Less Data as a Result of the Removal of the One or More Glitches from the Motion Data"	35
	E.	Reasons to Combine <i>Hyatt</i> with <i>Pasolini</i> , <i>Goldman</i> , <i>Mizell</i> , and <i>Park</i>	37
	F.	The Combination of <i>Pasolini</i> and <i>Marvit</i> Discloses "A Dominant Axis Logic to Determine a Dominant Axis"	40
	G.	The Combination of <i>Pasolini</i> and <i>Fabio</i> Also Discloses "A Dominant Axis Logic to Determine a Dominant Axis"	49
X.	CON	ICLUSION	54



Declaration of Dr. Irfan Essa U.S. Patent No. 8,872,646

I, Dr. Irfan Essa, declare as follows:

I. INTRODUCTION

- 1. As I testified in my declaration signed September 5, 2018, which I understand has been labeled as Exhibit 1010 in this proceeding, I have been retained by Samsung Electronics America Inc. ("Petitioner") as an independent expert consultant in this proceeding before the United States Patent and Trademark Office ("PTO"). I previously provided testimony in this proceeding in my September 5, 2018 declaration. (*See* Ex. 1010.) As with my previous work relating to this proceeding, no part of my compensation is contingent on the nature of my findings, the presentation of my findings in testimony, or the outcome of this or any other proceeding. I have no other interest in this proceeding. Relevant aspects of my qualifications were provided in my September 5, 2018 declaration. (*See id.* at ¶¶ 3-8; *see also* Ex. 1011 (curriculum vitae).)
- 2. I have been asked to consider whether substitute claim 23 included with Patent Owner Uniloc Luxembourg, S.A's ("Uniloc") Motion to Amend filed June 11, 2019, are supported by the originally filed specification of the '646 patent and whether certain references disclose or suggest the features recited in the substitute claim. My opinions are set forth below.



II. MATERIALS REVIEWED

- 3. The opinions in this Declaration are based on the documents I reviewed, my knowledge and experience, and professional judgment. In forming my opinions expressed in this Declaration, I have reviewed the following materials:
 - the '646 patent (Ex. 1001);
 - the prosecution file history for the '646 patent (Ex. 1002);
 - U.S. Patent No. 7,409,291 ("Pasolini") (Ex. 1003);
 - Using the LIS3L02AQ Accelerometer, Ron Goldman, Sun Microsystems Inc., dated February 23, 2007 (Ron Goldman ("Goldman") (Ex. 1004);
 - U.S. Patent No. 7,204,123 ("McMahan") (Ex. 1005);
 - U.S. Patent Publication No. 2006/0161377 ("Rakkola") (Ex. 1006);
 - Using Gravity to Estimate Accelerometer Orientation, David Mizell,
 Proceedings of the Seventh IEEE International Symposium on
 Wearable Computers (ISWC '03) 2003 ("Mizell") (Ex. 1007);
 - U.S. Patent No. 7,028,220 ("Park") (Ex. 1014);
 - Dictionary of Scientific and Technical Terms, McGraw-Hill (Ex. 1009); U.S. Patent No. 7,180,502 ("Marvit") (Ex. 1015);
 - U.S. Patent No. 7,463,997 ("Fabio") (Ex. 1016);



DOCKET

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.

