UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
SAMSUNG ELECTRONICS AMERICA, INC.
Petitioner
V.
UNILOC 2017 LLC
Patent Owner
IPR2018-01757
PATENT 8,712,723

## PATENT OWNER PRELIMINARY RESPONSE TO PETITION PURSUANT TO 37 C.F.R. §42.107(a)



## **Table of Contents**

1.	INT	RODUCTION	l		
II.	THE	'723 PATENT	1		
III.	REL	ATED PROCEEDINGS	2		
IV.	LEV	EL OF ORDINARY SKILL IN THE ART	3		
V.	LIKI	ITIONER DOES NOT PROVE A REASONABLE ELIHOOD OF UNPATENTABILITY FOR ANY ILLENGED CLAIM	3		
	A.	Claim Construction	4		
		1. "dominant axis"	5		
		2. "cadence window"	8		
		3. "logic" terms	8		
	B.	The Pasolini Reference Was Already Considered by the USPTO	9		
	C.	The Applied References Fail to Disclose a "Cadence Window"	10		
	D.	Petitioner has not and cannot cure Fabio's deficiencies by offering a new, undefended, and inconsistent definition for "cadence window"			
	E.	The Applied References Fail to Disclose Detected Motions "Within a Cadence Windows"			
	F.	The Applied References Fail to Disclose an Update to the Cadence Window as "Actual Cadence" or "Cadence" Changes			
	G.	The Applied References Fail to "Assigning a Dominant axis with Respect to Gravity Based on an Orientation of			



		the Inertial Sensor"	16
	Н.	The Applied References Fail to Disclose "Detecting a Change in the Orientation of the Inertial Sensor and Updating the Dominant Axis Based on the Change"	18
	I.	The Petition fails to Prove Obviousness of Any Dependent Claim	20
	J.	The Petition Redundantly Challenges Claims 4 and 19	21
II.		E PETITION SHOULD BE DENIED AS REDUNDANT TH PRIOR <i>INTER PARTES</i> REVIEW PETITIONS	24
	A.	The Board Has Held Denial is Appropriate Under These Facts	24
	B.	The Board's Precedential Factors Support Denial	25
VI.		E CONSTITUTIONALITY OF <i>INTER PARTES</i> REVIEW THE SUBJECT OF A PENDING APPEAL	26
VII.	COI	NCLUSION	27

## **List of Exhibits**

Exhibit No.	Description
2001	Declaration of Dr. William C. Easttom



#### I. INTRODUCTION

Uniloc 2017 LLC ("Uniloc" or "Patent Owner") submits this Preliminary Response to Petition IPR2018-01757 for *Inter Partes* Review ("Pet." or "Petition") of United States Patent No. 8,712,723 ("the '723 patent" or "EX1001") filed by Samsung Electronics America, Inc. ("Petitioner"). The instant Petition is procedurally and substantively defective for at least the reasons set forth herein.

### II. THE '723 PATENT

The '723 patent is titled "Human activity monitoring device." The '723 patent issued April 29, 2014, from U.S. Patent Application No. 13/018,321 filed January 31, 2011.

The inventors of the '723 patent observed that, at the time, step counting devices that utilize an inertial sensor to measure motion to detect steps generally required the user to first position the device in a limited set of orientations. In some devices, the required orientations are dictated to the user by the device. In other devices, the beginning orientation is not critical, so long as this orientation can be maintained. EX1001, 1:29-34. Further, the inventors observed that devices at the time were often confused by motion noise experienced by the device throughout a user's daily routine. The noise would cause false steps to be measured and actual steps to be missed in conventional step counting devices. Conventional step counting



devices also failed to accurately measure steps for individuals who walk at a slow pace. *Id.*, 1:35-40. Accordingly, the inventors introduced determining a rhythmic cadence and a correspondence cadence window concept that could anticipate when an expected periodic user activity is expected to occur. *Id.*, 3:46-4:4.

According to the invention of the '723 Patent, a device to monitor human activity using an inertial sensor assigns a dominant axis after determining the orientation of an inertial sensor. The orientation of the inertial sensor is continuously determined, and the dominant axis is updated as the orientation of the inertial sensor changes. *Id.*, 2:14-19. Periodic user activity in a cadence window is counted and the cadence is updated. *Id.*, 3:46-4:4.

### III. RELATED PROCEEDINGS

The following proceedings are currently pending cases concerning U.S. Pat. No. 8,712,723 (EX1001).

Case Caption	Case Number	District	Case Filed
Uniloc USA, Inc. et al. v.	2-17-cv-00522	TXED	June 30, 2017
Apple Inc.			
Uniloc USA, Inc. et al v.	2-17-cv-00650	TXED	Sept. 15,
Samsung Electronics America,			2017
Inc. et al			
Uniloc USA, Inc. et al v. LG	4-17-cv-00832	TXND	Oct. 13, 2017
Electronics USA, Inc. et al			
Uniloc USA, Inc. et al v. HTC	2-17-cv-01629	WAWD	Nov. 1, 2017
America, Inc.			



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