UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD APPLE, INC. Petitioner V. UNILOC LUXEMBOURG, S.A.¹ Patent Owner IPR2018-01028 PATENT 7,881,902

PATENT OWNER RESPONSE TO PETITION PURSUANT TO 37 C.F.R. §42.120

¹ The owner of this patent is Uniloc 2017 LLC.



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I. INTRODUCTION

Uniloc 2017 LLC ("Uniloc" or "Patent Owner") submits this Response to Petition IPR2018-01028 for *Inter Partes* Review ("Pet." or "Petition") of United States Patent No. 7,881,902 ("the '902 Patent" or "EX1001") filed by Apple, Inc. ("Petitioner"). The instant Petition is procedurally and substantively defective for at least the reasons set forth herein.

II. THE '902 PATENT

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 26, 2010, and is a continuation of U.S. Patent Application No. 11/644,455 filed December 22, 2006.

The inventors of the '902 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, 1:23–30. 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.*, 1:31–38. These non-exhaustive, example deficiencies of the art are among those that certain disclosed embodiments of the '902 patent overcome.



According to certain embodiments of the '902 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.*, 2:8–15.

III. RELATED PROCEEDINGS

The following proceedings are currently pending cases concerning U.S. Pat. No. 7,881,902 (EX1001).

Case Caption	Case Number	District	Case Filed
Uniloc USA, Inc. et al v. Apple Inc.	2-17-ev-00522	TXED	June 30, 2017
Uniloc USA, Inc. et al v. Samsung Electronics America, Inc. et al	2-17-cv-00650	TXED	September 15, 2017
Uniloc USA, Inc. et al v. LG Electronics USA, Inc. et al	4-17-cv-00832	TXND	October 13, 2017
Uniloc USA, Inc. et al v. HTC America, Inc.	2-17-cv-01629	WAWD	November 1, 2017
Uniloc USA, Inc. et al v. Huawei Device USA, Inc. et al	2-17-cv-00737	TXED	November 9, 2017
Apple Inc. v. Uniloc USA, Inc.	IPR2018-00424	PTAB	Jan. 5, 2018
Uniloc USA, Inc. et al v. Apple Inc.	4-18-cv-00364	CAND	January 17, 2018

IV. LEVEL OF ORDINARY SKILL IN THE ART

The Petition alleges that "a person of ordinary skill in the art ("POSITA") would include someone who had, at the priority date of the '902 Patent (i) a



Bachelor's degree in Electrical Engineering, Computer Engineering, and/or Computer Science, or equivalent training, and (ii) approximately two years of experience working in hardware and/or software design and development related to MEMS (micro-electro-mechanical) devices and body motion sensing systems." Pet. 5. Given that Petitioner fails to meet its burden of proof when purportedly applying its own definition of a person of ordinary skill in the art, Patent Owner does not offer a competing definition for purposes of this proceeding.

V. PROSECUTION HISTORY

The Petition neglects to mention it relies upon a reference the U.S. Patent Office has already found to be distinguishable from certain limitations also recited in the challenged claims. The '902 patent is part of a family of related patents including U.S. Patent Nos. 8,712,723 ("the '723 patent"). The '902 and '723 patents share a specification in common.

During prosecution of the application that issued as to the related '723 patent, the Examiner cited the same *Pasolini* reference² primarily relied upon in the instant Petition. In response, the Applicant successfully distinguished *Pasolini* as failing to "teach or suggest the use of cadence windows." In doing so, Applicant

³ See Public File Wrapper of '723 patent, Response dated Jan. 29, 2013 (at p. 6 of 9) to Office Action dated Sept. 26, 2012 (also filed by Petitioner as Exhibit 1002 in related-matter IPR2018-00389, at pp. 142 of 454).



² The prosecution history of the '723 patent references the printed publication (U.S. Serial App. Pub. No. 2007/0143068) of the same Pasolini reference that ultimately issued as U.S. Patent No. 7,463,997. The Petition opted to cite the issued patent in lieu of the printed publication.

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