

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE, INC.

Petitioner

v.

UNILOC LUXEMBOURG, S.A.

Patent Owner

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IPR2018-00424

PATENT 7,881,902

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**PATENT OWNER PRELIMINARY RESPONSE TO PETITION**

**PURSUANT TO 37 C.F.R. §42.107(a)**

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**List of Exhibits**

| <b>Exhibit No.</b> | <b>Description</b>  |
|--------------------|---|
| <b>2001</b>        | Declaration of William C. Easttom                                     |
| <b>2002</b>        | United States Patent No. 5,593,431 to Sheldon (“ <i>Sheldon II</i> ”) |

## I. INTRODUCTION

Uniloc Luxembourg S.A. (the “Uniloc” or “Patent Owner”) submits this Preliminary Response to Petition IPR2018-00424 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.

According to the invention 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.*, 2:10-17.

### 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         |
|--|---------------|----------|--------------------|
| <i>Uniloc USA, Inc. et al v. Apple Inc.</i>                              | 2-17-cv-00522 | TXED     | June 30, 2017      |
| <i>Uniloc USA, Inc. et al v. Samsung Electronics America, Inc. et al</i> | 2-17-cv-00650 | TXED     | September 15, 2017 |
| <i>Uniloc USA, Inc. et al v. LG Electronics USA, Inc. et al</i>          | 4-17-cv-00832 | TXND     | October 13, 2017   |
| <i>Uniloc USA, Inc. et al v. HTC America, Inc.</i>                       | 2-17-cv-01629 | WAWD     | November 1, 2017   |
| <i>Uniloc USA, Inc. et al v. Huawei Device USA, Inc. et al</i>           | 2-17-cv-00737 | TXED     | November 9, 2017   |
| <i>Uniloc USA, Inc. et al v. Apple Inc.</i>                              | 4-18-cv-00364 | CAND     | January 17, 2018   |
| <i>Apple v. Uniloc Luxembourg SA</i>                                     | IPR2018-01028 | PTAB     | May 4, 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

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