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**Lee et al.**

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(54) **METHOD AND APPARATUS FOR PROVIDING SERVICE USING A SENSOR AND IMAGE RECOGNITION IN A PORTABLE TERMINAL**

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(51) **Int. Cl.**

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| ***G03B 13/10*** | (2006.01) |
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| ***G06K 9/22*** | (2006.01) |
| ***H04N 1/00*** | (2006.01) |
| ***H04N 1/32*** | (2006.01) |
| *H04N 101/00* | (2006.01) |
| *H04W 4/02* | (2009.01) |

(52) **U.S. Cl.**

CPC ..... ***G01C 21/20*** (2013.01); ***G03B 13/10*** (2013.01); ***G06F 3/0346*** (2013.01); ***G06K 9/228*** (2013.01); ***H04N 1/00307*** (2013.01); ***H04N 1/32128*** (2013.01); *G06F 2203/04806* (2013.01); *H04N 2101/00* (2013.01); *H04N 2201/0084* (2013.01); *H04N 2201/328* (2013.01); *H04N 2201/3245* (2013.01); *H04N 2201/3252* (2013.01); *H04N 2201/3253* (2013.01); *H04N 2201/3273* (2013.01); *H04W 4/02* (2013.01)

(58) **Field of Classification Search**

CPC combination set(s) only.
See application file for complete search history.

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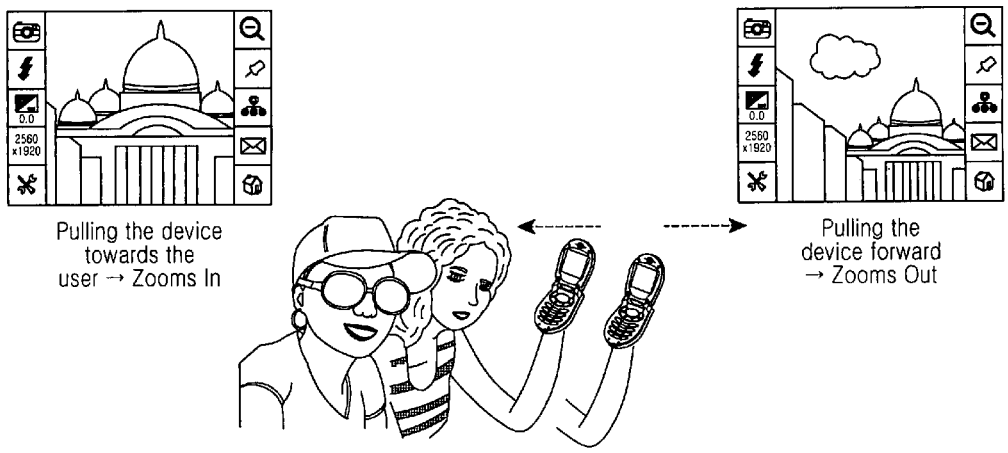
(57) **ABSTRACT**

A method and an apparatus provides a service using a sensor and image recognition in a portable terminal that supports Augmented Reality (AR). The method includes determining whether the portable terminal is parallel to ground using an acceleration sensor. When the portable terminal is parallel to the ground, either a map including nearby Point Of Interest (POI) information or constellation information is displayed.

**18 Claims, 9 Drawing Sheets**