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(12) United States Patent Ryu et al.

(54) METHOD AND APPARATUS FOR PROVIDING NOTIFICATION

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(56) References Cited

U.S. PATENT DOCUMENTS

9,197,738 B2 11/2015 Peev et al. (Continued)

FOREIGN PATENT DOCUMENTS

CN 103246062 A 8/2013 EP 2 288 122 2/2011 (Continued)

OTHER PUBLICATIONS

Communication dated Mar. 20, 2015 issued by the International Searching Authority in counterpart International Patent Application No. PCT/KR2014/012465.

(Continued)

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(57) ABSTRACT

An electronic device is provided. The electronic device includes: a transceiver configured to receive, from at least one wearable device, information indicating whether the at least one wearable device is being worn; and a processor configured to determine whether the at least one wearable device that is being worn, based on the received information indicating whether the at least one wearable device is being worn, and to provide a notification to the at least one wearable device in response to determining that the at least one wearable device is being worn.

30 Claims, 61 Drawing Sheets

