

COMPUTER-IMPLEMENTED METHOD AND DEVICE FOR MOBILE NODE TRACKING

ABSTRACT

A computer-implemented method (10) and a device (100) for mobile node
5 tracking are provided. The computer-implemented method (10) for mobile node tracking
includes executing on one or more processors the steps of: predicting (12) node
positions of a plurality of mobile nodes; receiving (16) ultra-wideband (UWB) ranging
data and instantaneous inertial measurement unit (IMU) data from each of the mobile
nodes; updating (18) the predicted node positions of the mobile nodes using the UWB
10 ranging data and the instantaneous IMU data; and broadcasting (20) the updated node
positions of the mobile nodes from the server to the mobile nodes.

[FIG. 1]