

ABSTRACT**SYSTEM AND METHOD FOR TRACKING MOTION OF TARGET IN INDOOR
ENVIRONMENT**

- 5 This disclosure relates generally to tracking motion of target in indoor environment. The method includes estimating an initial position of the target in a mesh grid form based on radar data captured from radar devices installed in the indoor environment. For a subsequent target movement, a subsequent position of the target is estimated in the mesh grid form based on the initial position and a resultant velocity vector of the target. A number of outlier grid-points is computed with a threshold
- 10 number, and based on comparison the outlier grid-points are either replaced with interpolated grid-points or the subsequent position of the target is repaired based on a probable position of the target obtained from at least one of a linear regression based analysis of prior positions of the target, prior knowledge of the target velocity and sampling interval, and a trilateration based technique.
- 15 [To be published with FIG. 5]