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**Tsai et al.**

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(54) **METHOD AND ELECTRONIC APPARATUS FOR ANGLE ESTIMATION VERIFICATION**

(56) **References Cited**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 361 days.

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(57) **ABSTRACT**

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**G01S 13/42** (2006.01)

A method for angle estimation verification, adapted for verifying an estimated angle calculated by an electronic apparatus having an angle estimator and at least three antennas, is provided. The estimated angle is extracted from the angle estimator. An autocorrelation matrix is generated according to a signal vector formed by a plurality of measurements of a received signal received by each of the antennas so as to obtain a plurality of eigenvalues. Among phase difference data generated by a plurality of antenna groups formed by all different combinations of two of the antennas, a plurality of possible estimated angles corresponding to the phase difference data not caused by a coterminal angle effect are calculated. According to the eigenvalues and the possible estimated angles, whether the received signal corresponds to a single target or multiple targets is determined so as to verify the reliability of the estimated angle.

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

CPC ... **G01S 3/74** (2013.01); **G01S 7/40** (2013.01);  
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See application file for complete search history.

**12 Claims, 2 Drawing Sheets**

