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[Continued on next page]

(54) **Title:** METHOD AND APPARATUS FOR USING MULTIPATH SIGNAL IN GPS ARCHITECTURE

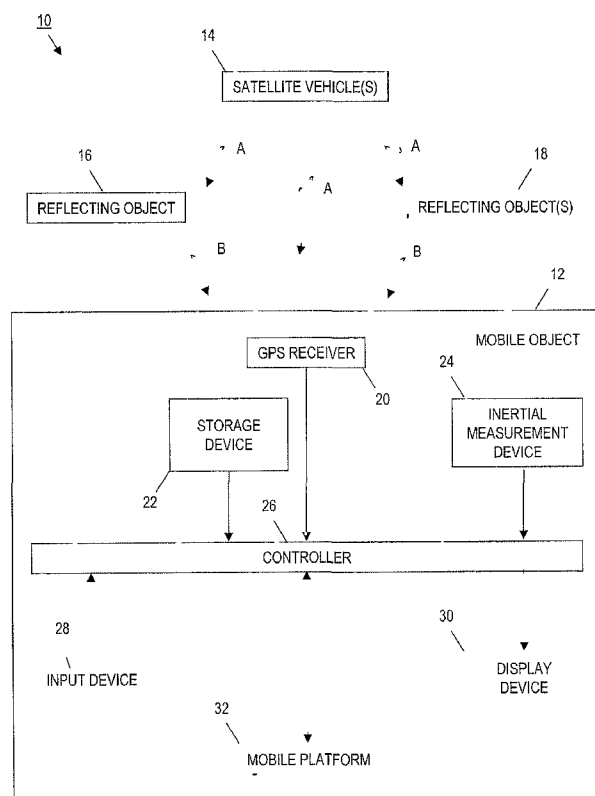


FIG 1

(57) **Abstract:** A method and apparatus for constructive use of a multipath signal in GPS signal processing is provided. In one embodiment, the method includes a) receiving a GPS signal at a mobile object from a satellite vehicle, b) determining a distance characteristic relating a reflecting object to the mobile object, c) determining at least one inertial characteristic associated with the mobile object, d) predicting at least one multipath signal characteristic associated with reflection of the GPS signal by the reflecting object toward the mobile object, and e) determining the GPS signal received in a) includes a multipath signal associated with reflection of the GPS signal by the reflecting object toward the mobile object. In one embodiment, the apparatus includes a GPS receiver, a storage device, an inertial measurement device, and a controller. In another embodiment, the apparatus also includes a distance measurement device.

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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EPO-Internal , wpi Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X A	US 2002/089450 A1 (DOWDLE JOHN R [US] ET AL DOWDLE JOHN R [US] ET AL) 11 July 2002 (2002-07-11) abstract figures 1-3, 4a-4d, 5, 7 paragraphs [0010] - [0023] paragraphs [0040] - [0053] paragraphs [0060] - [0082] paragraphs [0104] - [0115],, [0160] claims 1-5 ----- -/-	1, 5-12, 16, 20, 21 22, 31, 36

☒ Further documents are listed in the continuation of Box C

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* Special categories of cited documents

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

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