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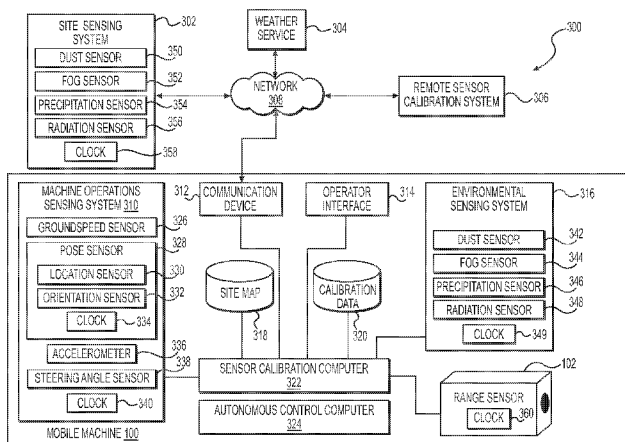


FIG. 3

(57) Abstract: In one embodiment, a method for evaluating calibration data collected by a range sensor (102) of a mobile machine (100) on a site (100) includes collecting a calibration data set (400) using the range sensor (102). The calibration data set (400) includes information indicating the locations of a plurality of points (402) on a surface of the site (104) relative to the range sensor (102). The method further includes determining an expected error score of the calibration data set (400). Finally, the method includes determining whether to use the calibration data set (400) to calibrate the range sensor based on the expected error score.

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A. CLASSIFICATION OF SUBJECT MATTER**G05D 1/02(2006.01)i, G05D 3/00(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: G05D 1/02; G06F 19/00; G06T 17/00; G01C 25/00; G01B 11/00; G01C 21/00

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: range sensor, evaluation, calibration, and mobile

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004-0073360 A1 (FOXLIN, E.) 15 April 2004 See Abstract; Paragraphs [0002]-[0454]; Claims 1-75; Figures 1-12.	1-10
A	US 2009-0222229 A1 (KAKINAMI, T.) 03 September 2009 See Abstract; Paragraphs [0002]-[0102]; Claims 1-11; Figures 1-18.	1-10
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A	US 2009-0167761 A1 (HAYASHI, T. et al.) 02 July 2009 See Abstract; Paragraphs [0002]-[0293]; Claims 1-31; Figures 1-20.	1-10

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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Information on patent family members

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