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(54) Title: SYSTEMS AND METHODS FOR ESTIMATING THE STRUCTURE AND MOTION OF AN OBJECT

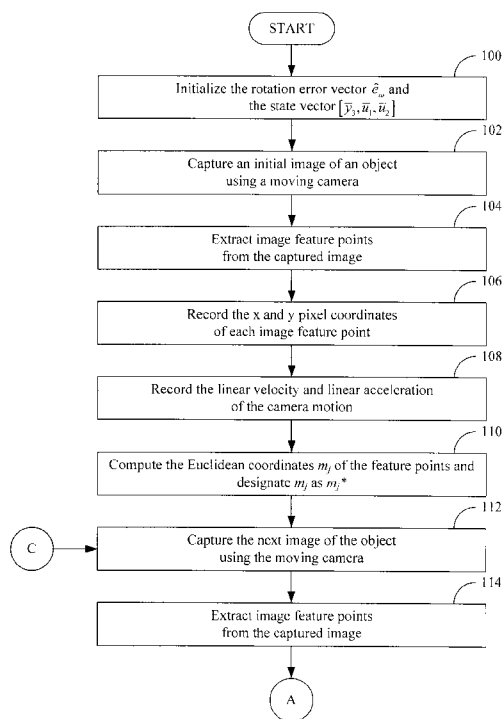


FIG. 1A

(57) Abstract: In one embodiment, the structure and motion of a stationary object are determined using two images and a linear velocity and linear acceleration of a camera. In another embodiment, the structure and motion of a stationary or moving object are determined using an image and linear and angular velocities of a camera.

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B. FIELDS SEARCHED

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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

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	RICHARD STEFFEN, Visual SLAM from image sequences acquired by unmanned aerial vehicles, July 2009 See pages 12,43,70,71,75,77,78,81,88,90,120, and figures 4.4, 4.8.	1-35
A	ASHWIN P. DANI et al., Structure and Motion Estimation of a Moving Object Using a Moving Camera, In: 2010 American Control Conference Marriott Waterfront, Baltimore, MD, USA, June 30-July 02, 2010, pp. 6962-6967 See abstract, pages 6963,6964,6966,6967, and figure 1.	1-35
A	ASHWINI AMARA, Object Detetion and Tracking Using Uncalibrated Cameras, University of New Orleans, May 2010 See abstract, pages 1-4, 46-49, and figure 11.	1-35
A	US 2009-0309966 A1 (CHEN CHAO-HO et al.) 17 December 2009 See abstract, paragraphs 0036-0040, claim 1, and figures 1, 2.	1-35

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

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009-0309966 A1	17.12.2009	TW 201001338 A	01.01.2010