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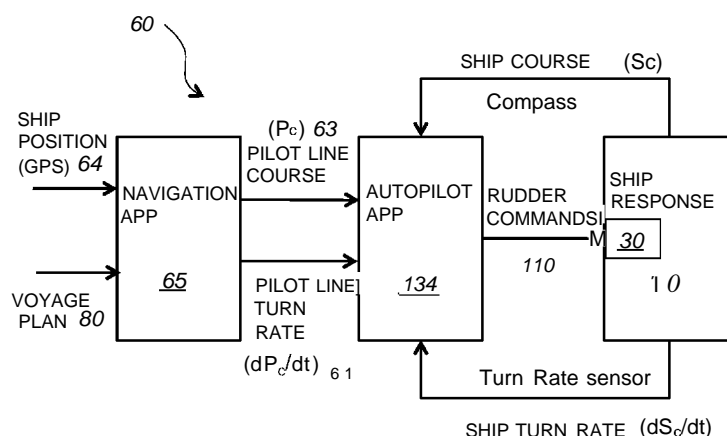
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(54) Title: SYSTEM AND METHOD FOR A MARINE VESSEL AUTOPILOT

**FIG. 3**

(57) **Abstract:** An autopilot system includes a navigation application for computing angular position and angular turn rate of a pilot line and an autopilot steering application for calculating steering commands for a ship steering device. The pilot line provides directional guidance to a ship and is a vector having one end attached to a point on the ship and a second end pointing to a desired direction. The autopilot steering application receives the computed pilot line angular position and angular turn rate and calculates angular position steering commands for the steering device. The ship steering device is set according to the calculated steering commands to steer the ship so that the ship's velocity vector lines up with the pilot line. The steering commands are calculated by taking into account the difference between the pilot line angular position and the ship's angular position and the difference between the pilot line angular turn rate and the ship's angular turn rate.

INTERNATIONAL SEARCH REPORT

International application No.
PCT /US201 1/060688**A. CLASSIFICATION OF SUBJECT MATTER****G05D 1/02(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)

G05D 1/02; H04Q 7/00; B63H 25/04; B62D 6/00; G01C 21/20; G06G 07/78

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: vessel, steer, auto, angular

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 2007-0162207 A1 (SHIMO, KAZUTOSHI et al.) 12 July 2007 See abstract; paragraphs [34]-[39]; figure 2; claims 3-4.	1,16,31 2-15,17-30,32-39
A	US 6995527 B2 (DEPASQUA, LOUIS) 07 February 2006 See abstract; claims 54, 66, 74.	1-39
A	US 05884213A A (CARLSON, BEN ANTHONY) 16 March 1999 See abstract; claims 1, 18, 36	1-39
A	JP 1996-119197 A (YOKOGAWA DENSHI K.K. CO., LTD.) 14 May 1996 See abstract; figures 1-6.	1-39

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

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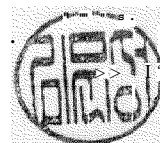
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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