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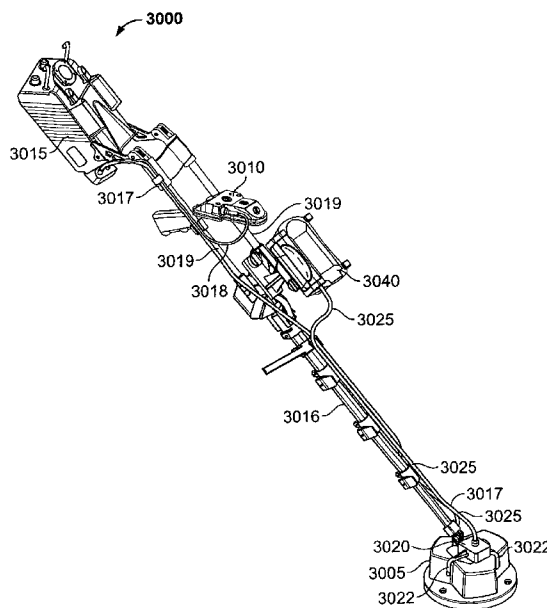
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(54) Title: MOTION AND POSITION MEASURING FOR BURIED OBJECT



(57) Abstract: A hand-held, wand-type buried object detector includes a motion and position sensor that provides data about the sensor head of the buried object detector. An inertial measuring device including three accelerometers and three gyroscopes is one example of a motion and position sensor. The buried object detector includes a processor/communicator device that is capable of processing the data from the motion and position sensor and communicating feedback, based on the processing results, to the operator about the operation of the buried object detector. In one example, a personal digital assistant may be configured for use as a processor/communicator device of a buried object detector.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G08B 21/00**(2006.01)
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USPC: 340/686.1,551,561,691.6;324/233,329

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)
 U.S. : 340/686.1,551,561,691.6;324/233,329

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,148,151 A (PODHRASKY) 15 September 1992 (15.09.1992), column 3, lines 64-68; columns 7 and 8.	1-5,7-10,15-19,21-24
Y	US 5,148,151 A (PODHRASKY) 15 September 1992 (15.09.1992), column 3, lines 64-68; columns 7 and 8.	6, 12, 13, 20
X	US A 5,055,793 (MULCAHEY) 08 October 1991 (08.10.1991), Figures 14-18.	11,14,27-31,34,35

Y		
A	US A (PODHRASKY) 08 June 1982 (08.06.1982), Figure 1.	6, 12, 13, 20

Further documents are listed in the continuation of Box C.

See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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