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(54) **Title:** AUTOMATED METER READING DEVICE

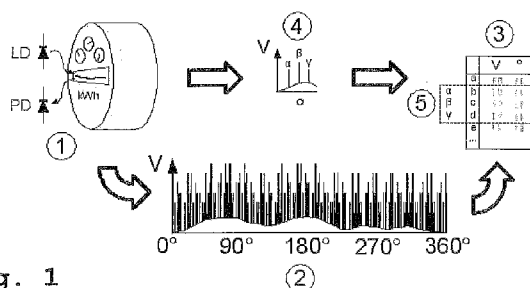


Fig. 1

(57) **Abstract:** The invention relates to a method and an apparatus for automated meter reading, for use with a rotating element that rotates according to energy consumption. An embodiment comprises at least one light detector arranged to output a detection signal based on light received from said rotating element, a processor arranged to determine a first time period, which is the time taken for a rotation of the rotating element, in dependence on variations in a said detection signal, wherein the processor further determines a second time period, which is a time between two variations in the at least one detection signal during said rotation of said rotating element, and determines a measure of energy consumption in dependence on the first and second time periods. Embodiments may use a plurality of detectors or use a speckle pattern of laser light reflected from a mechanical component that is typically rotational.

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A. CLASSIFICATION OF SUBJECT MATTER INV. G01D4/00 G01R11/16 G01D5/38 ADD.		
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) G01D G06M G01R G01F 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 practical, search terms used) 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	WO 97/05572 A1 (GEN ELECTRIC CO PLC [GB]) 13 February 1997 (1997-02-13)	9-13, 16-22, 25,26
Y	page 1, line 1 - page 2, line 9 page 5, line 8 - page 7, line 3 page 8, line 22 - page 9, line 22 figures 1,2	1-4,14, 15,23,24
X	WO 94/28428 A1 (ITRON INC [US]) 8 December 1994 (1994-12-08)	5-8
Y	page 1, line 7 - page 3, line 3 page 4, line 2 - line 9 page 5, line 1 - line 5 page 6, line 11 - line 13 figure 1	14,23
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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