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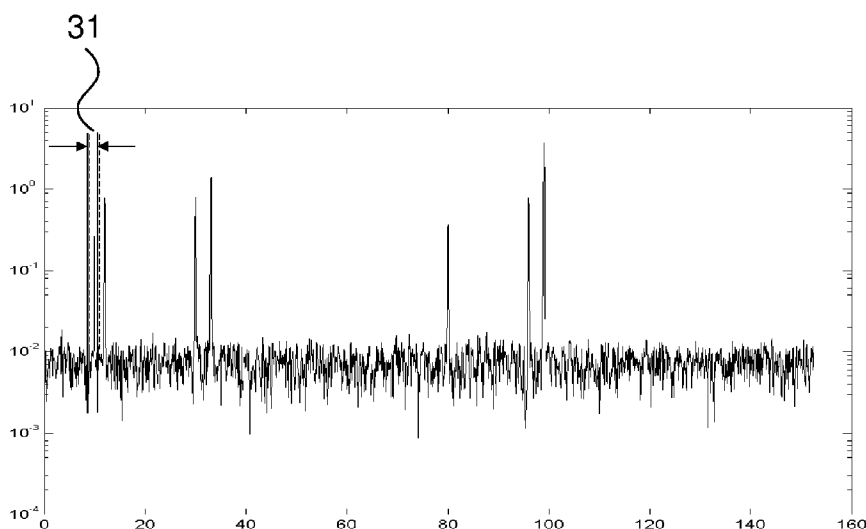
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(54) Title: A METHOD AND A SYSTEM FOR MONITORING THE CONDITION AND OPERATION OF PERIODICALLY MOVING OBJECTS



(57) Abstract: A system and a method for calculating a synchronized time average for a measurement signal obtained from an object (1) to be measured and containing periodical variations. In the method: from the periodical variations of the measurement signal a frequency (f_{MAX}) is determined, said frequency corresponding within predetermined limits ($f_E - e_2$, $f_E + e_2$) to a frequency estimated as the periodicity (f_E) characteristic of the object (1) to be measured; a signal component representing the determined frequency (f_{MAX}) is separated from the measurement signal by filtering, and the filtered signal is used as a synchronizing signal, and the measurement signal is divided into sequences by means of the synchronizing signal, and the synchronized time average of the sequences is calculated. In an example of the method, the rotating frequency or the moving frequency of the object (1) selected as the periodicity (f_E) characteristic to the object.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. G01H1/00

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)
G01H G01M

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.
A	US 6 789 025 B2 (BOERHOUT JOHANNES I [US]) 7 September 2004 (2004-09-07) cited in the application column 6, line 52 - column 7, line 58 abstract; figures 3-7	1-14
A	WO 96/05486 A (MONITORING TECH CORP [US]) 22 February 1996 (1996-02-22) page 2, line 24 - line 28	1-14
A	JP 57 191520 A (HITACHI LTD) 25 November 1982 (1982-11-25) abstract; figures 1,2	1-14

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☒ See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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