DEVICE AND MEASUREMENT METHOD OF A PATH COVERED

Abstract: With a measurement method and a measurement device for the measurement of a path covered by a first object (1) in relation to a second object (2), a measurement body (3) is deformed by a relative movement of the objects and at least a first deformation sensor (4) assigned to the measurement body (3) converts the measurement body (3) deformation into a measurement signal. The measurement signal is converted by an evaluation device (20) into information on the path covered. In order to increase the precision and measurement speed in a way that is simple structurally and saves space, an area of the measurement body is stretched along the longitudinal axis (6) of the measurement body (3) and a further area is compressed along the longitudinal axis of the measurement body (3).
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
   IPC(7) : G01L 1/04,1/20,1/22
   US CL : 73/862.451,862.473,862.474
   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. : 73/862.451,862.473,862.474,862.473
   Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
   NONE
   Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
   US-PGPUB, USPAT, EPO, JPO

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 6,039,344 (MENHEY et al.) 21 March 2000 (21.03.2000), Figures 2-5, column 3,</td>
<td>1,5,6,9-12,16-17,20-22</td>
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<tr>
<td></td>
<td>lines 25-45.</td>
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<td>Y</td>
<td>US 5,847,290 A (KIM) 08 December 1998 (08.12.1998), Figures 1-4, column 2, lines 25-34.</td>
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Form PCT/ISA/21.0 (second sheet) (January 2004)
Continuation of Item 4 of the first sheet:
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Device and measurement method of a path covered