A multi-phase process fluid is passed through a vibratable flowtube. Motion is induced in the vibratable flowtube. A first apparent property of the multi-phase process fluid based on the motion of the vibratable flowtube is determined, and an apparent intermediate value associated with the multi-phase process fluid based on the first apparent property is determined. A corrected intermediate value is determined based on a mapping between the intermediate value and the corrected intermediate value. A phase-specific property of a phase of the multi-phase process fluid is determined based on the corrected intermediate value.
INTERNATIONAL SEARCH REPORT

INTERNATIONAL SEARCH REPORT

A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G01F 1/84 (2007.10)
USPC - 73/861.355; 702/45

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)
USPC 73/861 355, 702/45

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC 73/861 355, 861 356, 861 357, 702/45 and (text search see below)

Electronic database consulted during the international search (name of data base and, where practicable, search terms used)
Electronic Databases: Search pubWEST/USPT, PGPB, EPAB,PAPAB, USPTO, Google, Answers.com, Google Scholar
Search terms: Vibrational, flowtube, multi-phase, motion, density, wet, gas, fluid, intermediate, value, mass flow rate, corrected, neural, network, mapping

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 2006/0156831 A1 (RIEDER et al.) 20 July 2006 (20 07 2006) para [0004], [0006]-[0008], [0010], [0011], [0016], [0020], [0025], [0029], [0032], [0044], [0060], [0066], [0081], [0085], [0087], [0094], [0098] and [01 13]</td>
<td>1-5, 7-10 and 13-24</td>
</tr>
<tr>
<td>Y</td>
<td>US 2005/0216242 A1 (FLAX et al.) 29 September 2005 (29 09 2005) para [0148],[0151], [0153], [0158], [0168] and [0173],[0174]</td>
<td>12 and 25</td>
</tr>
</tbody>
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Further documents are listed in the continuation of Box C

* Special categories of cited documents
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent but published on or after the international filing date
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**X** document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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**K** document member of the same patent family

Date of the actual completion of the international search: 17 December 2007 (17 12 2007)
Date of mailing of the international search report: 13 FEB 2008

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Form PCT/ISA/210 (second sheet) (April 2007)