Title: METHODS AND SYSTEMS FOR MONITORING ENVIRONMENTS

Abstract: Methods and systems are provided for monitoring a state of an environment. Sensors are distributed spatially within the environment, with each sensor measuring one of the measured parameters at its spatial location. A controller receives data collected from each of the sensors. The controller identifies the occurrence of an event at least one of the sensors. The controller extracts derived parameters from the collected data. The controller determines a cross-correlation of the extracted parameters over the sensors. The controller identifies an abnormality in the environment from the determined cross-correlation.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC: G06F 11/00(2006.01)

USPC: 702/2,188
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.: 702/2,188

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

Electronic database consulted during the international search (name of database and, where practicable, search terms used)
Please See Continuation Sheet

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>
</table>

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* 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 published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"D" 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

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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

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"A" document member of the same patent family

Date of the actual completion of the international search: 28 February 2006 (28.02.2006)

Date of mailing of the international search report: 22 May 2005

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Form PCT/ISA/210 (second sheet) (April 2005)
Continuation of B. FIELDS SEARCHED Item 3:
Search Text: EAST;US-PGPUB;USPAT;USOCR;EPO;PO;DERWENT;IBM_TDB
Search Terms: environment,monitoring,near,system,fuzzy,concentration,fluid