Title: CLASSIFICATION OF DEVIATIONS IN A PROCESS

Abstract: A process analysis system (100) includes sensors (102, 103, 104) and a processing system (105). The sensors (102, 103, 104) monitor the process to generate sensor signals (111). The processing system (105) processes the sensor signals (111) to detect a deviation from a baseline for the process (101). The processing system (105) generates a process vector for the deviation in response to detecting the deviation. The processing system (105) compares the process vector to a plurality of library vectors to classify the deviation. In some examples, the process (101) comprises a system that supplies water.
**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US03/41744

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 15/00
US CL : 702/183

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)


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 practical, 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>
<tbody>
<tr>
<td>A</td>
<td>US 6,301,572 B1 (Harrison) 09 October 2001.</td>
<td>1-32</td>
</tr>
</tbody>
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☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

Date of the actual completion of the international search


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Date of mailing of the international search report

08 OCT 2004

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Form PCT/ISA/210 (second sheet) (January 2004)
Continuation of B. FIELDS SEARCHED Item 3:
USPAT-US-PGPUB
sensor, monitoring, plurality, process, signal, deviation, baseline, vector, library, classify