Abstract: Methods and apparatus consistent with the invention provide the ability to organize, index, search, and present time series data based on searches. Time series data are sequences of time stamped records occurring in one or more usually continuous streams, representing some type of activity. In one embodiment, time series data is organized into discrete events with normalized time stamps and the events are indexed by time and keyword. A search is received and relevant event information is retrieved based in whole or in part on the time indexing mechanism, keyword indexing mechanism, or statistical indices calculated at the time of the search.
Published: with international search report

(88) Date of publication of the international search report: 9 April 2009
### INTERNATIONAL SEARCH REPORT

**PCT/US07/80616**

**A. CLASSIFICATION OF SUBJECT MATTER**

<table>
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<tr>
<th>IPC:</th>
<th>G06F 7/00 (2006.01)</th>
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**USPC:** 707/5

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.:** 707/5

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 practicable, search terms used)

- US-PGPUB, USPAT, USOCR, FPRS, EPO, IPO, DERWENT, IBM-TDB

**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 2005/0071379 (Kekre et al) 31 March 2005 (31.03.2005), paragraphs 37-38, 43-47, 51, 53, 77, 82-83, 89 and 95</td>
<td>1-12, 14-29 and 31-33</td>
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<td>Y</td>
<td>US 6,763, 347 (Zhang) 13 July 2004 (13.06.2004), column 2, lines 1-18, column 5, lines 1-67, and column 6, lines 1-55</td>
<td>13 and 30</td>
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- Further documents are listed in the continuation of Box C.

- Special categories of cited documents:
  - "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
  - "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
  - "&" document member of the same patent family

**Date of the actual completion of the international search**

21 May 2008 (21.05.2008)

**Name and mailing address of the ISA/US**

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Alexandria, Virginia 22313-1450

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

**Date of mailing of the international search report**

12 JUN 2008

**Authorized officer**

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