Title: ARCHITECTURE FOR NATURAL LANGUAGE QUERYING IN SERVICE ANALYTICS DOMAINS

Abstract: A natural language interface is used to interact with data in a service analytics database. Domain entities from the database are initially mapped to an entity relationship model including machines, events, sensor values, service notifications, and spare parts records. A natural language query is then parsed, mapped to elements of the entity relation model and translated into a standard query language.

Fig. 1
(88) Date of publication of the international search report:

12 December 2013
## INTERNATIONAL SEARCH REPORT

**International application No**

PCT/US2013/021626

### A. CLASSIFICATION OF SUBJECT MATTER

**INV.**

G06F17/30

**ADD.**

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)

G06F

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)

EPO-Internal, WPI Data, COMPENDEX, INSPEC

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<td>X</td>
<td>Frank Meng ET AL: &quot;Database Query Formation from Natural Language using Semanti c Model ing and Stati sti cal Keywy rd Meani ng Di sambiguation&quot; , 1 January 1999 (1999-01-01), XP055081888, Retrieved from the Internet: URL: <a href="http://www.cobase">http://www.cobase</a>. es.ucla.edu/tech-doc s/ucl a-a-9900Q3 .pdf [retrieved on 2013-10-01] page 1, last paragraph - page 3, paragraph 3; figure 1</td>
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### Date of the actual completion of the international search

15 October 2013

### Date of mailing of the international search report

21/10/2013

### Name and mailing address of the ISA/

European Patent Office, P.B. 5018 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016

Authorized officer

Wohner, Wolfgang
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<td>X</td>
<td>WO 01/90953 A2 (RENSSELAER POLYTECH INST [US]; HSU CHENG [US]; BOONJING VEERA [US]) 29 November 2001 (2001-11-29) page 3, last line - page 4, line 2 page 6, lines 15-23 page 14, lines 6-18 page 18, line 10 - page 21, line 21; figure 2</td>
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