Title: GENERATING A DATABASE MODEL FROM NATURAL LANGUAGE EXPRESSIONS OF BUSINESS RULES

Abstract: The invention relates to a method for generating a database model from a set of business rules. For a business rule given as input, an empty list of fact types is created (Fig 2, B1 202). A determination of whether the business rule is a definitional rule defining that one or more propositions become true upon occurrence of an event is made (Fig 2, B1 204). If the business rule is a definitional rule, the fact type of each of the propositions is added to the list of fact types (Fig 2, B1 205). Otherwise, a determination of whether the business rule is an authorization rule for provision of information that comprises one or more authorized provisions of information corresponding to one or more fact types is made. If the business rule is an authorization rule for provision of information, the corresponding fact types are added to the list of fact types (Fig 2, B1 208). For each fact type in the list of fact types, the fact type having at least one role, the role having a type, if the type of the role is not a lexical type, the type is added to a list of types. The types in the list of types are processed and the fact types in the list of fact types are processed (Fig 2, B1 220, 222).
# INTERNATIONAL SEARCH REPORT

## A. CLASSIFICATION OF SUBJECT MATTER

IPC:
- G06F 17/00( 2006.01)
- G06N 7/00( 2006.01)
- G06N 7/08( 2006.01)
- G06F 17/00( 2006.01)
- G06N 7/00( 2006.01)
- G06N 7/08( 2006.01)

USPC: 706/57

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. 706/57

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

- Google (Natural Language Processing)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
- EAST (Natural Language Processing (Business Rule) Fact Type)

## 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>Rasmussen (USPN 7,185,016) C09-62, Fig 4A</td>
<td>1-21</td>
</tr>
</tbody>
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- [ ] 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
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- **"O"** 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

### Date of the actual completion of the international search

- 21 May 2008 (21.05.2008)

### Date of mailing of the international search report

- 17 JUL 2008

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