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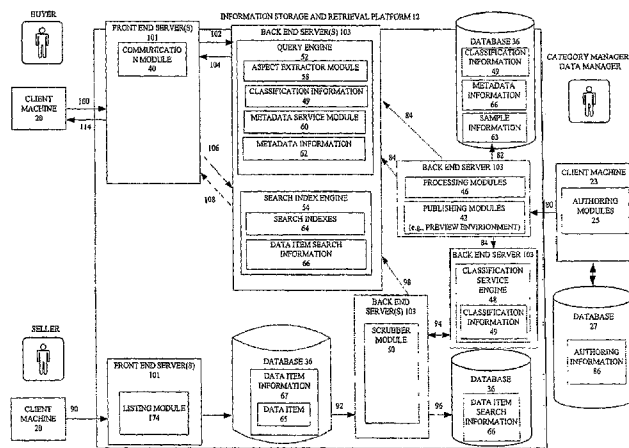
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(54) Title: METHODS AND SYSTEMS TO ANALYZE RULES



(57) Abstract: There is provided methods and systems to analyze rules. The rules may be used to structure data items in a database and to transform search requests for the data items in the database. The transformed search request utilizes the structured data items to identify data items to be returned in a search result to the originator of the search request; the search results being more relevant to the user because of the structuring of the data items and the transformation of the query. Analysis of the above described rules enables a category manager that authors such rules to determine the effectiveness of the rules prior to their publication into a live environment.

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/06102

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(8) - G06F 17/30 (2008.01) USPC - 707/3 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) USPC: 707/3 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 707/1, 3, 6, 10; 715/748, 968 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWest(PGPB,USPT,USOC,EPAB,JPAB); Google Scholar Search Terms Used: database, search, retrieve, query processing, text, query rules, classification, popular queries etc.		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004/0254920 A1 (BRILL et al.) 16 December 2004 (16.12.2004), para [0008]-[0030], para [0063]	1-53
Y	US 2003/0126117 A1 (MEGIDDO et al.) 03 July 2003 (03.07.2003), para [0003]-[0028]	1-53
Y	US 2005/0060320 A1 (BOSTROM) 17 March 2005 (17.03.2005), para [0008]-[0020]	11-53
A	US 6,751,606 B1 (FRIES et al.) 15 June 2004 (15.06.2004)	1-53
A	US 2004/0068460 A1 (FEELEY et al.) 08 April 2004 (08.04.2004)	1-53
A	US 2003/0078915 A1 (CHAUDHURI et al.) 24 April 2003 (24.04.2003)	1-53
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/>		
* 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 but 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) "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 "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 15 February 2008 (15.02.2008)		Date of mailing of the international search report <b>17 MAR 2008</b>
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/06102

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

- 1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
- 2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
- 3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:  
This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.  
Group 1, claims 1-10, drawn to a query processing system/method for processing plurality of queries to search a database and applying plurality of rules to identify matching keyword in the most popular query.

Group 2, claims 11-53, drawn to an information storage and retrieval system/method for retrieving plurality of data items and applying plurality of rules to identify the data items associated with a domain.

The inventions listed as Groups 1-2 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature of the Group I invention is processing plurality of queries to search a database and applying plurality of rules to identify matching keyword in the most popular query. The special technical feature of the Group II invention is retrieving plurality of data items and applying plurality of rules to identify the data items associated with a domain. None of these special technical features are common to the other groups, nor do they correspond to a special technical feature in the other groups. Therefore, unity of invention is lacking.

- 1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
- 2.  As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
- 3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
- 4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

- Remark on Protest**
- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
  - The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
  - No protest accompanied the payment of additional search fees.