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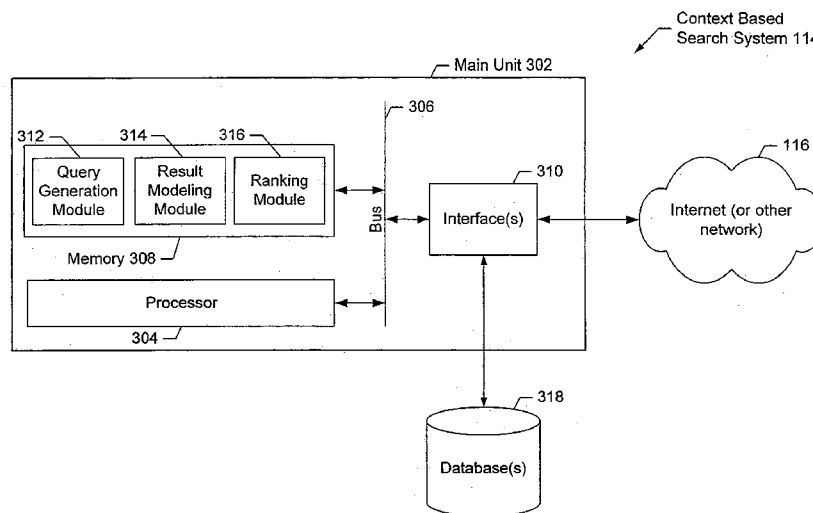
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10 July 2008

(54) Title: METHODS AND APPARATUS FOR COMPUTERIZED SEARCHING



(57) Abstract: Methods and apparatus assessing, ranking, organizing, and presenting search results associated with a user's current work context are disclosed. The system disclosed assesses, ranks, organizes and presents search results against a user's current work context by comparing statistical and heuristic models of the search results to a statistical and heuristic model of the user's current work context. In this manner, search results are assessed, ranked, organized, and/or presented with the benefit of attributes of the user's current work context that are predictive of relevance, such as words in a user's document (e.g., web page or word processing document) that may not have been included in the search query. In addition, search results from multiple search engines are combined into an organization scheme that best reflects the user's current task. As a result, lists of search results from different search engines can be more usefully presented to the user.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/61381

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 17/30; G06F 15/00 (2008.01)

USPC - 707/3, 7; 715/273

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)

IPC(8): G06F 17/30; G06F 15/00 (2008.01)

USPC: 707/3, 7; 715/273

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

USPC: 707/1, 3, 6, 7, 10; 709/203, 217, 219; 715/200, 256, 273, 968

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Electronic databases: USPTO WEST (PGPB, USPT, EPAB, JPAB); Google Scholar

Search Terms Used: searching or querying databases or web pages, displaying or filtering or organizing or sorting search results, ranking or scoring or weighting search results, comparing or matching word or text or document, search engine etc.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2005/0278321 A1 (Vailaya et al.) 15 December 2005 (15.12.2005) (abstract, and para [0013]-[0016], [0066]-[0086], [0103]-[0116])	1-218
Y	US 2005/0251496 A1 (DeCoste et al.) 10 November 2005 (10.11.2005) (abstract, and para [0030]-[0033], [0051]-[0056], [0071]-[0080])	1-39, 107-139, 166-173, 180-206, 213-218
Y	US 2004/0034629 A1 (Genser) 19 February 2004 (19.02.2004) (abstract, and para [0020]-[0027], [0045]-[0049], [0059]-[0061])	40-69, 174-176, 207-209
Y	US 2004/0260695 A1 (Brill) 23 December 2004 (23.12.2004) (abstract, and para [0007]-[0012], [0028]-[0033], [0044]-[0051])	70-106, 177-179, 210- 212
Y	US 2004/0059727 A1 (Yano et al.) 25 March 2004 (25.03.2004) (abstract, and para [0008]-[0010], [0032]-[0039], [0052]-[0058], [0076]-[0082])	140-165
A	US 2005/0216434 A1 (Haveliwala et al.) 29 September 2005 (29.09.2005)	1-218
A	US 2005/0149496 A1 (Mukherjee et al.) 07 July 2005 (07.07.2005)	1-218
A	US 6,751,612 B1 (Schuetze et al.) 15 June 2004 (15.06.2004)	1-218

 Further documents are listed in the continuation of Box C.

* 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

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/61381

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/0019588 A1 (Doganata et al.) 29 January 2004 (29.01.2004)	1-218
A	US 2003/0009451 A1 (Bates et al.) 09 January 2003 (09.01.2003)	1-218
A	US 6,499,029 B1 (Kurapati et al.) 24 December 2002 (24.12.2002)	1-218
A	US 2002/0099694 A1 (Diamond et al.) 25 July 2002 (25.07.2002)	1-218
A	US 6,275,820 B1 (Navin-Chandra et al.) 14 August 2001 (14.08.2001)	1-218

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/61381

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:

See Extra Sheet

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.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/US 07/61381

continuation of:

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

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 1-39, drawn to a method/apparatus/computer readable medium for displaying ranked search results based on determined search results scores.

Group 2, claims 40-69, drawn to a method/apparatus/computer readable medium for displaying organized search results based on organization schemes.

Group 3, claims 70-106, drawn to a method/apparatus/computer readable medium for filtering search results based on determined search results scores and engaged user task.

Group 4, claims 107-139, drawn to a method/apparatus/computer readable medium for characterizing search result as potential spam based on determined spam score.

Group 5, claims 140-165, drawn to a method/apparatus/computer readable medium for displaying search results based set document length, document words, and similarity score thresholds.

Group 6, claims 166-185, drawn to a method/apparatus/computer readable for displaying/organizing ranked search results based on search results obtained from different search engines.

Group 7, claims 186-218, drawn to a method/apparatus/computer readable medium for displaying/organizing ranked search results based on received results model from the search engine.

The inventions listed as Groups 1-7 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 1 invention is displaying ranked search results based on determined search results scores. The special technical feature of the Group 2 invention is displaying organized search results based on organization schemes. The special technical feature of the Group 3 invention is filtering search results based on determined search results scores and engaged user task. The special technical feature of the Group 4 invention is characterizing search result as potential spam based on determined spam score. The special technical feature of the Group 5 invention is displaying search results based set document length, document words, and similarity score thresholds. The special technical feature of the Group 6 invention is displaying/organizing ranked search results based on search results obtained from different search engines. The special technical feature of the Group 7 invention is displaying/organizing ranked search results based on received results model from the search engine. 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.