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[Continued on next page]

(54) Title: FEATURE ENGINEERING AND USER BEHAVIOR ANALYSIS

(57) Abstract: Systems and techniques are disclosed to rank documents by analyzing a query log generated by a search engine. The query log includes data relating to user behavior, queries and documents. The systems and techniques distill query log information into surrogate documents and extract features from these surrogate documents to rank the documents.

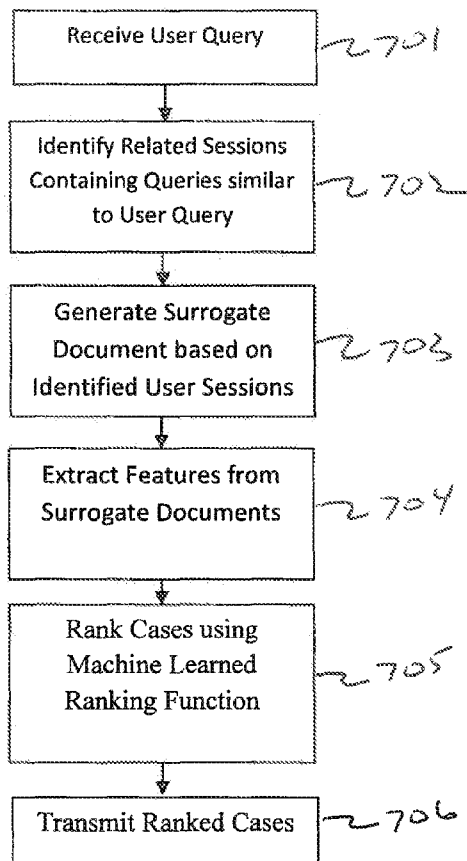


FIGURE 7

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KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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# INTERNATIONAL SEARCH REPORT

International application No  
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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. G06F17/30 ADD.		
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) 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 practical, search terms used) EPO-Internal, WPI Data, INSPEC		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 169 986 B1 (BOWMAN DWAYNE E [US] ET AL) 2 January 2001 (2001-01-02) * abstract column 1, line 14 - column 1, line 47 column 2, line 29 - column 3, line 60 column 4, line 34 - column 4, line 52 column 4, line 66 - column 5, line 57 column 6, line 47 - column 7, line 7 column 8, line 6 - column 9, line 56 column 12, line 43 - column 12, line 58 ----- -/--	1-19
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.		
<input checked="" type="checkbox"/> 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	"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	
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	
"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  <p style="text-align: center; font-size: 1.2em;">2 December 2010</p>	Date of mailing of the international search report  <p style="text-align: center; font-size: 1.2em;">13/12/2010</p>	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  <p style="text-align: center; font-size: 1.2em;">Boyadzhiev, Yavor</p>	

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>ZAIANE O R ET AL: "Discovering Web access patterns and trends by applying OLAP and data mining technology on Web logs", RESEARCH AND TECHNOLOGY ADVANCES IN DIGITAL LIBRARIES, 1998. ADL 98. P ROCEEDINGS. IEEE INTERNATIONAL FORUM ON SANTA BARBARA, CA, USA 22-24 APRIL 1998, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 22 April 1998 (1998-04-22), pages 19-29, XP010276880, DOI: DOI:10.1109/ADL.1998.670376 ISBN: 978-0-8186-8464-7</p> <p>* abstract  page 19, right-hand column, line 3 - page 20, left-hand column, line 31  page 20, right-hand column, line 1 - page 21, right-hand column, line 38  page 23, left-hand column, line 60 - page 23, right-hand column, line 57  page 25, left-hand column, line 9 - page 25, left-hand column, line 50  page 26, left-hand column, line 9 - page 26, right-hand column, line 42</p> <p>-----</p>	1-19
A	<p>WESTLAW INTERNATIONAL: "WestLaw International Research Guide", INTERNET CITATION, 1 January 2005 (2005-01-01), pages 1-38, XP002607351, [retrieved on 2005-01-01]  page 2, line 1 - page 2, line 7  page 3, line 1 - page 5, line 7  page 13, line 1 - page 15, line 14</p> <p>-----</p>	1-19

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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