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(54) Title: IMPLICIT RATING OF RETRIEVED INFORMATION IN AN INFORMATION SEARCH SYSTEM

200

201	202	203	204
INFORMATION ITEM	LOCATION	RELEVANCY RATING	ACCESS TIME
ITEM1	LOCATION1	36	TIME1
ITEM2	LOCATION2	75	TIME2
ITEM3	LOCATION3	113	TIME3
ITEM4	LOCATION4	224	TIME4
•	•	•	•
ITEMN	LOCATIONN	R <sub>R</sub> N	TIME5

(57) Abstract: An information retrieval system allows a user to search a database of informational items for a desired informational item, and presents the search result in the form of matching index entries in the order of relevance. The information retrieval system in accordance with the principles of the present invention assigns a relevance rating to each of the index entries without requiring an explicit input from the user with respect to the usefulness or the relevance of the retrieved information corresponding to the respective index entries. When the user selects and retrieves an informational item through a list of index entries presented by the retrieval system, as a result of a search, the relevance rating of the selected informational item is increased by a predetermined amount. The relevance rating of the selected informational item is further adjusted based on any actions the user takes subsequent to the initial selection of the informational item if the subsequent act indicates that the relevance of the selected informational item may be less than what is reflected by the rating increase by the predetermined amount. Ratings of the informational items in the database are determined from implicit suggestions from the usage of the retrieval system and the database by the user rather than from an explicit user input.



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# INTERNATIONAL SEARCH REPORT

International Application No  
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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G06F17/30

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 7 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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 5 870 740 A (ROSE DANIEL E ET AL) 9 February 1999 (1999-02-09)</p> <p>abstract column 4, line 29 -column 4, line 67 column 5, line 52 -column 7, line 3 column 7, line 47 -column 8, line 21</p> <p style="text-align: center;">--- -/--</p>	<p>1-3, 7-12, 15-23, 27-29</p>

Further documents are listed in the continuation of box C.

Patent family members are listed in 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 document but published on or after the international filing date
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- \*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**

tional Application No PCT/US 01/11959
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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>MOBASHER B ET AL: "Creating adaptive Web sites through usage-based clustering of URLs"</p> <p>KNOWLEDGE AND DATA ENGINEERING EXCHANGE, 1999. (KDEX '99). PROCEEDINGS. 1999 WORKSHOP ON CHICAGO, IL, USA 7 NOV. 1999, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 2000, pages 19-25, XP010377877                      ISBN: 0-7695-0453-1                      abstract                      page 19, right-hand column, line 28 -page 20, right-hand column, line 16                      page 22, right-hand column, line 7 -page 23, left-hand column, line 50</p>	1-29
A	<p>L. PAGE, S. BRIN, R. MOTWANI, T. WINOGRAD: "The PageRank Citation Ranking: Bringing Order to the Web"</p> <p>STANFORD DIGITAL LIBRARY TECHNOLOGIES PROJECT, 'Online!                      29 January 1998 (1998-01-29), pages 1-17, XP002213518                      Retrieved from the Internet:                      &lt;URL:http://citeseer.nj.nec.com/page98page rank.html&gt; 'retrieved on 2002-09-16!                      abstract                      page 5, line 6 -page 6, line 4                      page 7, line 8 -page 7, line 32                      page 11, line 25 -page 12, line 13</p>	1-29

## INTERNATIONAL SEARCH REPORT

International application No.

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### Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

An information retrieval system allows a user to search a database of informational items for a desired informational item, and presents the search result in the form of matching index entries in the order of relevance. The information retrieval system in accordance with the principles of the present invention assigns a relevance rating to each of the index entries without requiring an explicit input from the user with respect to the usefulness or the relevance of the retrieved information corresponding to the respective index entries. When the user selects and retrieves an informational item through a list of index entries presented by the retrieval system, as a result of a search, the relevance rating of the selected informational item is increased by a predetermined amount. The relevance rating of the selected informational item is further adjusted based on any actions the user takes subsequent to the initial selection of the informational item if the subsequent act indicates that the relevance of the selected informational item may be less than what is reflected by the rating increase by the predetermined amount. Ratings of the informational items in the database are determined from implicit suggestions from the usage of the retrieval system and the database by the user rather than from an explicit user input.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5870740	A	NONE	