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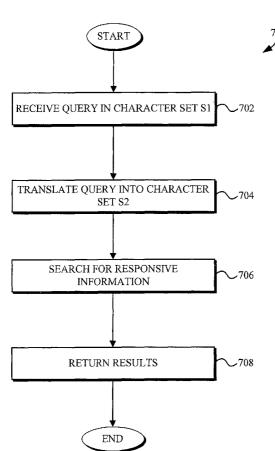
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[Continued on next page]

(54) Title: SYSTEMS AND METHODS FOR SEARCHING USING QUERIES WRITTEN IN A DIFFERENT CHARACTER-SET AND/OR LANGUAGE FROM THE TARGET PAGES



(57) Abstract: Methods and apparatus consistent with the invention allow a user to submit an ambiguous search query and to receive relevant search results. Queries can be expressed using character sets and/or languages that are different from the character set and/or language of at least some of the data that is to be searched. A translation between these character sets and/or languages can be performed by examining the use of terms in aligned text. Probabilities can be associated with each possible translation. Refinements can be made to these probabilities by examining user interactions with the search results.



 $\label{eq:tn_tr_def} \text{TN}, \text{TR}, \text{TT}, \text{TZ}, \text{UA}, \text{UG}, \text{US}, \text{UZ}, \text{VC}, \text{VN}, \text{YU}, \text{ZA}, \text{ZM}, \\ \text{ZW}.$

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INTERNATIONAL SEARCH REPORT

Internation No PCT/US2004/029772

a. classii IPC 7	FICATION OF SUBJECT MATTER G06F17/27								
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									
Documentat	ion searched other than minimum documentation to the extent that su	ch documents are included in the fields sea	arched						
DOCUMENTATION searched other fright Hillimitati documentation to the extent more spon documents are included. In the news searched									
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)									
	ternal, INSPEC								
2. 5									
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C. DOCUMENTS CONSIDERED TO BE RELEVANT									
Category °	Citation of document, with indication, where appropriate, of the rele	vant passages	Relevant to claim No.						
Α	EP 0 597 611 A (CANON RESEARCH CE	INTRE	1,30						
	EUROPE LIMITED; CANON EUROPA N.V; RESEARCH) 18 May 1994 (1994-05-18	CANON B)							
	abstract								
A	RESNIK P ET AL: "The Web as a pa	1,30							
^	corpus"								
	COMPUTATIONAL LINGUISTICS MIT PRE ASSOC. COMPUT. LINGUISTICS USA,	ESS FOR							
	vol. 29, no. 3, July 2002 (2002-0	07), pages							
	1-29, XP002327039	7.1 3							
	ISSN: 0891-2017 paragraph [2.1.1] - paragraph [2.1.2]								
Furth	ner documents are listed in the continuation of box C.	Patent family members are listed in	n annex.						
° Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but									
	ent defining the general state of the art which is not ered to be of particular relevance	cited to understand the principle or the invention							
"E" earlier o	document but published on or after the international ate	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to							
which	nt which may throw doubts on priority claim(s) or is cited to establish the publication date of another	involve an inventive step when the document is taken alone Y" document of particular relevance; the claimed invention							
citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or cannot be considered to involve an inventive step when the document is combined with one or more other such document.									
other means ments, such combination being obvious to a person skilled in the art.									
later than the priority date claimed "&" document member of the same patent family									
Date of the actual completion of the international search Date of mailing of the international search report 1.7. 08. 2005									
1	9 May 2005	1 <i>1</i> , UU.	400J						
Name and n	nailing address of the ISA	Authorized officer							
	European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk								
	Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Triest, J							

INTERNATIONAL SEARCH REPORT



Box 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 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 additional sheet						
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 an additional fee, this Authority did not invite payment of any additional fee.						
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. $\boxed{\chi}$ 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.: $1-13,30-33$						
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.						

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13,30-33

method and computer program product for aligning text using hyperlinks

2. claims: 14-21, 39-43, 44-45

method for performing a search based on a translated query

3. claims: 22-29,34-38

method for creating a probablistic dictionary using aligned data

INTERNATIONAL SEARCH REPORT

Intormation on patent family members

Internal Application No PCT/US2004/029772

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 0597611	A	18-05-1994	GB DE DE EP ES US	2272091 A 69322741 D1 69322741 T2 0597611 A2 2128395 T3 5893134 A	04-05-1994 04-02-1999 02-06-1999 18-05-1994 16-05-1999 06-04-1999
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Form PCT/ISA/210 (patent family annex) (January 2004)