(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 19 February 2004 (19.02.2004)

PCT

(10) International Publication Number WO 2004/015905 A3

(51) International Patent Classification⁷: G06F 9/45

(21) International Application Number:

PCT/US2003/024097

(22) International Filing Date: 1 August 2003 (01.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/217,114 12 August 2002 (12.08.2002)

(71) Applicant: REUTERS RESEARCH INC. [US/US]; 100 William Street, New York, NY 10038 (US).

- (72) Inventors: MAHONEY, John; 4 Country Squire Lane, Princeton Junction, NJ 08550 (US). BOROVIKOV, Dmitry; 62 Elwood Road, Northport, NY 11768 (US). CURTIS, Kevin; 91 Linvale Road, Ringoes, NJ 08551 (US). KOLFMAN, Michael; 8118 23rd Avenue, Apt. 3B, Brooklyn, NY 11214 (US).
- (74) Agent: BRANDT, Jeffrey; Axiom Legal Solutions c/o PortfolioIP, P.O. Box 52050, Minneapolis, MN 55402

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 12 August 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(57) Abstract: Systems and methods (20, 200) for processing content packages such as human-readable documents identify and analyze content type. Structural (300) and logical (500) evaluation of a content package is performed, followed by analysis and indexing of concepts within the package. Analysis and identification of concepts and sub-concepts may be an iterative process. Concepts are indexed (800) in accordance with different rule sets representing different consumer needs and perspectives. Customers can then use the indices to navigate large groups of content packages based on the concepts contained within those packages and also on keywords associated with concepts.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/24097

A. CLASSIFICATION OF SUBJECT MATTER					
IPC(7) : G06F 9/45					
US CL : 717/121, 136; 707/3, 5, 102; 715/515					
	International Patent Classification (IPC) or to both nat	ional classification and IPC			
	DS SEARCHED				
Minimum doo	cumentation searched (classification system followed by	y classification symbols)			
U.S.: 71	7/121, 136; 707/3, 101; 715/500.1, 515, 517, 526				
Dogumentatio	as searched other than minimum documentation to the	extent that such documents are included in	n the fields searched		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic dat	a base consulted during the international search (name	of data base and, where practicable, sear	rch terms used)		
C. DOCI	UMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.		
X	US 6.202.201 B1 (Dom) 13 March 2001, Abstract, c	olumn 2, lines 55-57, col. 3, lines 54-	1-18		
	67, col. 4, lines 1-38; col. 9, lines 12 - col. 10, line 2	25; tables 1-3 and associated texts;			
	Fig(s) 3-14 and associated texts.				
			1-18		
Α	US 6,263,335 B1 (Paik et al). 17 July 2001, All		1-10		
	i.				
Further	documents are listed in the continuation of Box C.	See patent family annex.			
	pecial categories of cited documents:	"T" later document published after the int	ernational filing date or priority		
	•	date and not in conflict with the appli	cation but cited to understand the		
"A" document	t defining the general state of the art which is not considered to be	principle or theory underlying the inv			
		"X" document of particular relevance; the considered novel or cannot be consid	claimed invention cannot be		
"E" earlier ap	plication or patent published on or after the international filing date	when the document is taken alone	ored to mitorite an intentite step		
"L" documen	t which may throw doubts on priority claim(s) or which is cited to	"Y" document of particular relevance; the	claimed invention cannot be		
establish specified	the publication date of another citation or other special reason (as	considered to involve an inventive sto	en when the document is		
•		combined with one or more other such being obvious to a person skilled in t	ch documents, such combination		
	t referring to an oral disclosure, use, exhibition or other means				
	t published prior to the international filing date but later than the	"&" document member of the same paten	t family		
priority date claimed		Data of mailing of the international sea	rch report		
Date of the actual completion of the international search		Date of mailing of the international search report			
11 May 2004 (11.05.2004)		// 02 JUN 2004			
Name and mailing address of the ISA/US		Authorized officer			
Mail Stop PCT, Attn: ISA/US		Susan Y Chen			
	mmissioner for Patents D. Box 1450	1///			
Ale	exandria, Virginia 22313-1450	Telephone No. 703-305-3900			
Facsimile No. (703) 305-3230					
DCT/ICA /210 (second sheet) (July 1998)					

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/24097

Box I Obser	vations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)		
This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:			
	Claim Nos.: because they relate to subject matter not required to be searched by this Authority, namely:		
2.	Claim 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.	Claim Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).		
Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)			
	onal Searching Authority found multiple inventions in this international application, as follows: ontinuation Sheet		
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. 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. Remark on F	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.: 1-18 Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.		

INTERNATIONAL SEARCH REPORT				
,				
BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LAC A telephone interview has been conducted on May 10, 2004 (Please see attached tel instant claims as follwoing: Group 1, Claims 1-18, drawn to managing software component for designing document group 2, Claims 19-20, drawn to generate database index structure. Group 3, Claims 21-34, drawn to compond document processing. Group 4, Claims 35-37, drawn to database query processing.	ephone interview for reference) for the restriction of			
Application has elected Group 1 for continuing the instant PCT searching/examination processing.				
	1			
	•			

Form PCT/ISA/210 (second sheet) (July 1998)

PCT/US03/24097