(19) World Intellectual Property Organization

International Bureau





PCT

(43) International Publication Date 23 December 2004 (23.12.2004)

(51) International Patent Classification: *G06F 17/30* (2006.01)

(21) International Application Number:

PCT/US2004/018508

(22) International Filing Date: 10 June 2004 (10.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/459,734 12 June 2003 (12.06.2003) US

(71) Applicant (for all designated States except US): INTER-NATIONAL BUSINESS MACHINES CORPORA-TION [US/US]; New Orchard Road, Armonk, NY 10504 (US).

(72) Inventors: DETTINGER, Richard, D.; 5305 Kensington Lane N.W., Rochester, MN 55901 (US). STEVENS, Richard, J.; 3707 Arbor Drive N.W., Rochester, MN 55901 (US).

(74) Agents: JOHNSON, Grant, A. et al.; IBM Corporation, Dept. 917/Bldg. 006-1, 3605 Highway 52 North, Rochester, MN 55901-7829 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

(10) International Publication Number WO 2004/111793 A3

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, 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, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv))

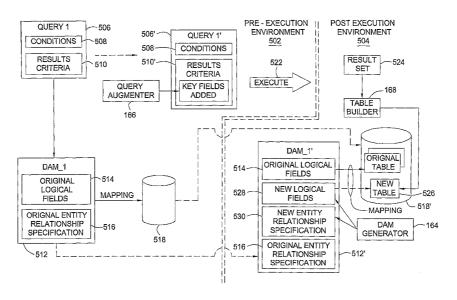
Published:

with international search report

(88) Date of publication of the international search report: 13 July 2006

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.

(54) Title: ITERATIVE DATA ANALYSIS PROCESS VIA QUERY RESULT AUGMENTATION AND RESULT DATA FEED-BACK



(57) Abstract: The present invention is generally directed to a system, method and article of manufacture for accessing data represented abstractly through an abstraction model (512). In one embodiment, a data abstraction model (512) provides a logical view of an underlying data repository (518) that is independent of the particular manner of data representation. For a given abstract query (506) the abstract query (506) is augmented with additional computer-selected result fields (520). In addition, the data abstraction model (512) is also augmented with fields (528) corresponding to the result fields (514) of the previously executed abstract query.

INTERNATIONAL SEARCH REPORT

International application No.

		PCT/US04/18508		Щ'
A. CLASSIFICATION OF SUBJECT MATTER IPC(7): G06F 17/30 US CL: 707/3 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) U.S.: 707/3				
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 practicable, search terms used)				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where a	appropriate, of the relevan	it passages	Relevant to claim No.
X 	US 6,516,312 B1 (KRAFT et al) 4 February 2003		1-14, 16-21, 23, 28-35 and 37-48	
Y	US 6,266,660 B1 (LIU et al) 24 July 2001 (24.06.2	1001) col 1 lines 50.55		15, 22, 24
Y	US 5,870,746 A (KNUTSON et al) 9 February 1999 (09.02.1999), column 16, lines 25-35			15, 22
Further	documents are listed in the continuation of Box C.	See patent fan	nily annex.	
* Special categories of cited documents:			-	ational filing date or priority
"A" document defining the general state of the art which is not considered to be of particular relevance		date and not in co principle or theor	onflict with the applicati ry underlying the invent	on but cited to understand the tion
"E" earlier app	olization or patent published on or after the international filing date	considered novel	or cannot be considere	aimed invention cannot be d to involve an inventive step
"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)		"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		
"O" document referring to an oral disclosure, use, exhibition or other means		obvious to a pers	on skilled in the art	such combination being
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family		
Date of the actual completion of the international search 27 December 2004 (27.12.2004)		Date of mailing of the international search report 29 MAR 2006		
Name and mailing address of the ISA/US		- 1		7
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450		Safet Metjahic Michellik Lor		
Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Telephone No. (571) 2'	12-4023	

Form PCT/ISA/210 (second sheet) (January 2004)