(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau

(43) International Publication Date 15 September 2011 (15.09.2011)





(10) International Publication Number WO 2011/112744 A3

- (51) International Patent Classification: *G06F 17/30* (2006.01)
- (21) International Application Number:

PCT/US2011/027785

(22) International Filing Date:

9 March 2011 (09.03.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/721,704

11 March 2010 (11.03.2010) US

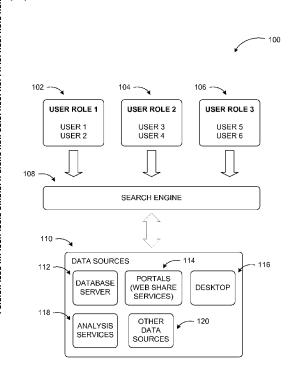
- (71) Applicant (for all designated States except US): MI-CROSOFT CORPORATION [US/US]; One Microsoft Way, Redmond, WA 98052-6399 (US).
- (72) Inventors: WANG, Luming; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, WA 98052-6399 (US). YANG, Xiaohong; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, WA 98052-6399 (US).

AMIROV, Anton; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, WA 98052-6399 (US). HUSSAIN, Malik; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, WA 98052-6399 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, 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.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

[Continued on next page]

(54) Title: USER ROLE BASED CUSTOMIZABLE SEMANTIC SEARCH



(57) Abstract: User role based customizable searches, where crawled documents may be evaluated against user roles or attributes during crawl time, are provided. Metadata retrieved from searched documents may also be evaluated against the user roles and/or attributes such that customized search results ranking documents based on their content beyond textual content may be provided.

FIG. 1

EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, Published: LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

24 November 2011

International application No. **PCT/US2011/027785**

A. CLASSIFICATION OF SUBJECT MATTER

G06F 17/30(2006.01)i

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: G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: crawl*, index, rank, user role, metadata, search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008-0104042 A1 (ZACHARY GUTT et al.) 01 May 2008 See abstract; paragraphs [0017] - [0021]; figure 1	1-15
A	KR 10-2009-0060131 A (ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE) 11 June 2009 See abstract; paragraphs [0014] - [0020]; claim 1	1-15
A	JP 2000-348049 A (FUJITSU LTD.) 15 December 2000 See abstract; paragraphs [0014]-[0022]; claim 1	1-15
A	US 2005-0131762 A1 (KRISHNA BHARAT et al.) 16 June 2005 See abstract; paragraphs [0037] - [0043]; figure 1	1-15

		Further documents are l	listed in the	continuation	of Box C.
--	--	-------------------------	---------------	--------------	-----------

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
- 'E" earlier application or patent but published on or after the international filing date
- 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other
- "P" document published prior to the international filing date but later than the priority date claimed
- "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
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "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 mailing of the international search report

Date of the actual completion of the international search

28 SEPTEMBER 2011 (28.09.2011)

28 SEPTEMBER 2011 (28.09.2011)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office Government Complex-Daejeon, 189 Cheongsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

KWON, Young Hak

Telephone No. 82-42-481-5777



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2011/027785

		101,6	PC1/US2011/02//85	
Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 2008-0104042 A1	01.05.2008	EP 2076855 A1 EP 2076855 A4 JP 2010-508579 A KR 10-2009-0071606 A W0 2008-051692 A1	08.07.2009 03.02.2010 18.03.2010 01.07.2009 02.05.2008	
KR 10-2009-0060131 A	11.06.2009	None		
JP 2000-348049 A	15.12.2000	JP 3601675 B2	15. 12. 2004	
US 2005-0131762 A1	16.06.2005	AU 2004-311786 A1 AU 2004-311786 B2 AU 2009-222546 A1 BR P10418343A CA 2552181 A1 CN 1922626 A EP 1709577 A2 EP 1709577 A4 JP 2007-517321 A JP 2010-176675 A KR 10-0887169 B1 KR 10-2006-0130156 A KR 10-2008-0103605 A W0 2005-065229 A2 W0 2005-065229 A3	21.07.2005 29.10.2009 22.10.2009 02.05.2007 21.07.2005 28.02.2007 11.10.2006 23.09.2009 28.06.2007 12.08.2010 10.03.2009 18.12.2006 27.11.2008 21.07.2005 06.10.2005	