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13/077,223 31 March 2011 (31.03.2011) US
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- (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, QA, RO, RS, RU, RW, 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.

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**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))

**Published:**

- with international search report (Art. 21(3))

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(54) Title: SYSTEMS AND METHODS FOR PARAGRAPH-BASED DOCUMENT SEARCHING

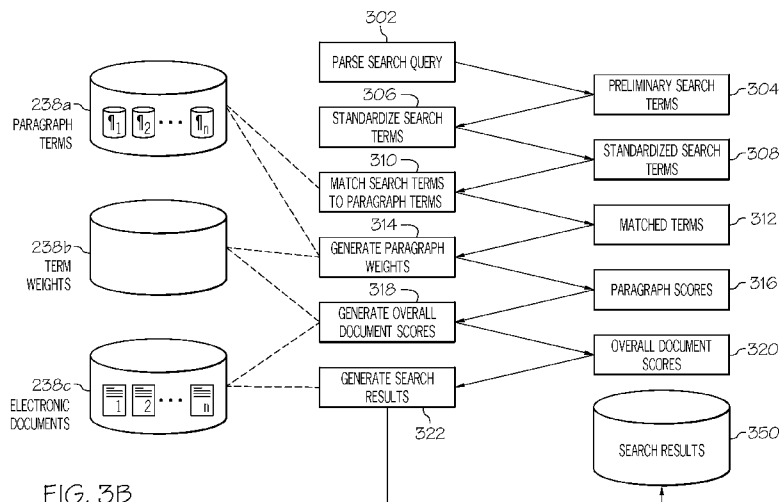


FIG. 3B

(57) Abstract: A computerized method of searching a collection of electronic documents may include comparing search terms to sets of paragraph terms associated with paragraphs in the documents. Search terms and paragraph terms may be standardized, prior to the comparison. The method may also include generating paragraph scores for the paragraphs using term weight values associated with paragraph terms that match search terms, generating paragraph scores for the paragraphs, and using the paragraph scores to generate overall document scores. The method may also include using the overall document scores to determine a set of search results and providing the search results to a display.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US 12/30235

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC(8) - G06F 17/30 (2012.01)  
 USPC - 707/728  
 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)  
 707/728

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 707/705,722,728-731

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 PubWEST(PGPB,USPT,EPAB,JPAB): Google Scholar; Term, keyword, satandardize, weight, collection, document, inverse frequency scores, electronic document, paragraph, section

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2008/0263023 A1 (Vailaya et al.) 23 October 2008 (23.10.2008) entire document (especially para [0054]-[0055],[0154]-[0155],[0137],[0231]-[0234], [0236], [0267])	1, 5-8, 14-15, and 19 ----- 2-4, 9-13, 16-18, 20
Y	US 7,283,997 B1 (Howard Jr. et al.) 16 October 2007 (16.10.2007) (col. 10, ln 43-58)	2-4, 9-12, 16-18
Y	US 2010/0131569 A1(Jamison et al.) 27 May 2010 (27.10.2010) (para [0014]-[0015],[0027])	13, 20
A	US 2006/0155690 A1 (Wen et al.) 13 July 2006 (13.07.2006) entire document	1-20
A	US 2009/0248675 A1 (Kawabata et al.) 01 October 2009 (01.10.2009) entire document	1-20
A	US 2008/0263033 A1 (Vailaya et al.) 23 October 2008 (23.10.2008) entire document	1-20

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	
“A” document defining the general state of the art which is not considered to be of particular relevance	“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
“E” earlier application or patent but published on or after the international filing date	“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
“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 obvious to a person skilled in the art
“O” document referring to an oral disclosure, use, exhibition or other means	“&” document member of the same patent family
“P” document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 05 June 2012 (05.06.2012)	Date of mailing of the international search report <b>20 JUN 2012</b>
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Lee W. Young  PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774
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