

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number
WO 2005/010691 A3

(51) International Patent Classification:
G06F 17/00 (2006.01)

(74) Agents: **SETH H. OSTROW, ESQ.** et al.; BROWN
RAYMAN MILLSTEIN FELDER & STEINER LLP, 900
Third Avenue, New York, NY 10022 (US).

(21) International Application Number:
PCT/US2004/022844

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
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, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 14 July 2004 (14.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/623,115 18 July 2003 (18.07.2003) US

(63) Related by continuation (CON) or continuation-in-part
(CIP) to earlier application:
US 10/623,115 (CON)
Filed on 18 July 2003 (18.07.2003)

(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).

(71) Applicant (*for all designated States except US*): **OVER-
TURE SERVICES, INC.** [US/US]; Chris Higgins, Patent
Dev. Counsel, 74 North Pasadena Avenue, 3rd Floor,
Pasadena, CA 91103 (US).

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*

(71) Applicants and

(72) Inventors: **CARRASCO, John Joseph M.** [US/US];
1130 Palm Terrace, Pasadena, CA 91104 (US). **FLAKE,
Gary William** [US/US]; 633 Chaparral Court, Altadena,
California 91001 (US).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **FAIN, Daniel C.**
[US/US]; 3949 Los Feliz Blvd, Apt. 416, Los Angeles,
California 90027 (US).

(88) Date of publication of the international search report:
29 June 2006

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: DISAMBIGUATION OF SEARCH PHRASES USING INTERPRETATION CLUSTERS

(57) Abstract: In one implementation, a method is provided for increasing the relevance of search results, which may include receiving a search query and identifying the search query as ambiguous, clustering a plurality of search results for the search query into interpretation clusters, and generating a search results list based on the interpretation clusters. Search results from different interpretation clusters may be interleaved when generating the search results list. In one implementation, a method for disambiguation of search phrases is provided, which may include identifying interpretation clusters using bidded search terms of content providers and influencing a position of a search result in a search results list based on the interpretation clusters. It may include identifying terms and associated content providers and calculating a matrix from the identified terms and associated content providers. Similarity scores between content providers based on the matrix are calculated and interpretation clusters are assigned using similarity scores.

WO 2005/010691 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/22844

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **G06F 17/30** (2006.01)

USPC: 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 appropriate, of the relevant passages	Relevant to claim No.
X	US 5,675,819 A (Schuetze) 7 Oct 1997 (07.10.1997), col 12, lines 53-63	1-4, 6, 9 and 10
---		-----
Y		5, 7, 8, 11-121
Y	Pub No US 2002/0169760 A1 (Cheung et al) 14 Nov 2002 (14.11.2002), paragraph 26	5, 7, 8 and 11
Y	Pub No US 2003/0055816 A1 (PAINE) 20 Mar 2003, (20.03.2003), Figures 15-17 and paragraph 102	12-121

☐ Further documents are 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	"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 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 02 March 2006 (02.03.2006)	Date of mailing of the international search report 09 MAY 2006
---	--

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 <i>Jeffrey Gartin</i> Jeffrey Gartin Telephone No. (571) 272-4146
---	---