

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
10 March 2005 (10.03.2005)

PCT

(10) International Publication Number  
WO 2005/022320 A3

(51) International Patent Classification:  
G06Q 30/00 (2006.01)

(US). BIGBY, Michael, D. [US/US]; 5918 Exeter Court,  
San Jose, CA 95138 (US).

(21) International Application Number:  
PCT/US2004/027511

(74) Agent: HICKMAN, Brian, D.; Hickman, Palermo  
Truong & Becker LLP, Suite 550, 2055 Gateway Place,  
San Jose, CA 95110-1089 (US).

(22) International Filing Date: 24 August 2004 (24.08.2004)

(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, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10/648,599 25 August 2003 (25.08.2003) US

(71) Applicant (for all designated States except US): YAHOO  
INC. [US/US]; D-274, 701 First Avenue, Sunnyvale, CA  
94089 (US).

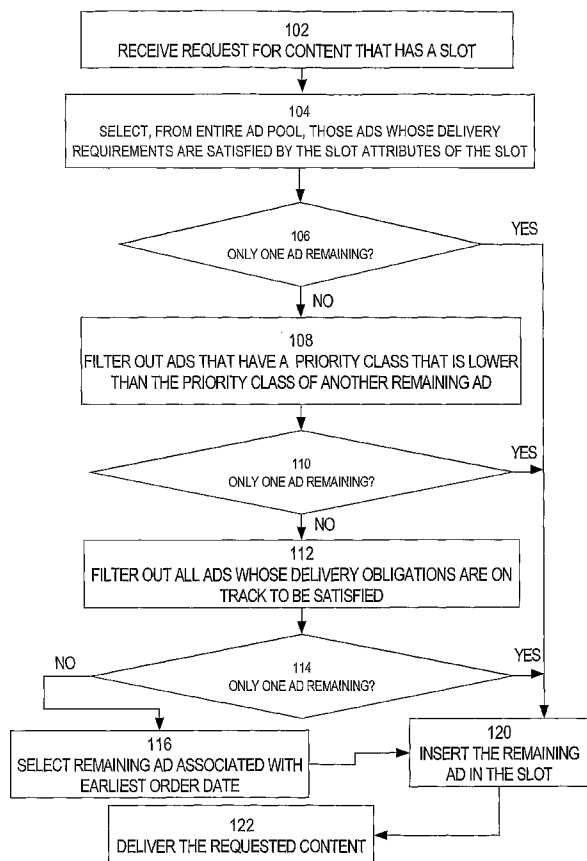
(72) Inventors; and

(75) Inventors/Applicants (for US only): MEHTA, Bhavesh  
[US/US]; 7569 Bollinger Road, Cupertino, CA 95014

(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),

[Continued on next page]

(54) Title: SELECTING AMONG ADVERTISEMENTS COMPETING FOR A SLOT ASSOCIATED WITH ELECTRONIC  
CONTENT DELIVERED OVER A NETWORK



(57) Abstract: Techniques are provided for selecting among the advertisements that are competing for a slot based, at least in part, on an "schedule sequence" that is established for the advertisements. The schedule sequence may, for example, reflect the relative times at which a content provider incurred the delivery obligations associated with the advertisements. For the purpose of establishing the sequence, the date on which an advertisement order is placed may be considered to be the date on which the corresponding delivery obligations are incurred. After the schedule sequence has been established, the position of competing advertisements within the schedule sequence is used as one of the factors for determining which competing ad to place in a slot, where ads nearer the beginning of the sequence (ads with earlier-incurred delivery obligations) are favored over ads that are nearer the end of the sequence (ads with later-incurred delivery obligations). For example, if all other factors are equal, the selection mechanism would select ad X over ad Y due to the fact that ad X is positioned ahead of ad Y in the schedule sequence.

WO 2005/022320 A3



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).

**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:**  
15 February 2007

*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.*

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/27511

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: **G06Q 30/00( 2007.01)**

USPC: 705/14

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. : 705/14

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)

EAST: advert\$, schedul\$, order, target\$

**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 2002/0128904 A1 (CARRUTHERS et al) 12 September 2002 (12.09.2002), paragraphs 7, 8, 15, 20, 26, 34, 35, 38.	1, 4-7, 9-11 ----- 2, 3, 8
A	US 6,286,005 B1 (CANNON) 04 September 2001 (04.09.2001), entire document.	
A	US 6,088,722 (HERZ et al) 11 July 2000 (11.07.2000), col 30 lines 18-38.	

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

"E" earlier application or patent 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 another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"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 the actual completion of the international search

01 December 2006 (01.12.2006)

Date of mailing of the international search report

05 JAN 2007

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

Jeffrey D. Carlson

Telephone No. (571) 272-3600