(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 19 April 2007 (19.04.2007)

(51) International Patent Classification: H04L 12/66 (2006.01)

(21) International Application Number:

PCT/US2006/038947

(22) International Filing Date: 4 October 2006 (04.10.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/723,960 6 October 2005 (06.10.2005) US 11/503,908 15 August 2006 (15.08.2006) US

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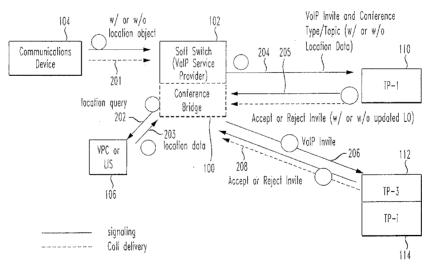
(10) International Publication Number WO 2007/044455 A3

- (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, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, 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, IS, IT, LT, LU, LV, 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: 8 May 2008

(54) Title: VOICE OVER INTERNET PROTOCOL (VOIP) LOCATION BASED CONFERENCING



(57) Abstract: A Voice over Internet Protocol (VoIP) device (104) uses its location to narrow down known and unknown potential VoIP third parties (110, 1 12, 1 14) meeting the user's criteria, based on their physical proximity to the initial caller and other predetermined characteristics, to join in a phone conference. A VoIP soft switch (102) includes conference bridges (100) that eliminate the conventional requirement that they dial digits for a direct link with another specific VoIP communications device (112). Instead, location information (203) relating to the initial VoIP user (104) is passed to the VoIP conference bridge (100), either from the user's VoIP communication device (104) or from their respective location server (106). The location information is then compared by the VoIP soft switch (102) against other VoIP devices to find potential VoIP users within a defined geographic region surrounding the initial VoIP user. Those VoIP users matching the criteria are sent an Invite message (204, 206) to join the conference, which they may or may not accept (205, 208).



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/38947

A. CLASSIFICATION OF SUBJECT MATTER IPC: H04L 12/66(2006.01)					
USPC: 370/352					
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.: 370/352,351,260-269					
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. DOCU	JMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where ap			Relevant to claim No.	
. X	US PGPuB 20040047461 (WEISMAN) 11 March 20 page 6 paragraph 88, pages 6-7 paragraph 101	04 (11.03.2	2004), page 7 paragraph 111,	1	
X	US PG PuB 20040032485 (STEPHENS) 19 February 2004 (19.02.2004), Figures 5, 2, 1, page 5 paragraphs 40, 42, 43, page 2 paragraph 17,			2, 5, 8, 11	
Y				3-4, 6-7, 9-10, 12-13	
Y	US 6882850 (MCCONNELL) 19 April 2005 (19.04.2005), col 7-8 lines 60-2			3 and 9	
Y	US 6539232 (HENDREY) 25 March 2003 (25.03.2003), column 9 lines 1-15			4 and 10	
Y	US PG PuB 20040047342 (GAVISH) 11 March 2004 (11.03.2004), Fig. 2, paragraphs 26 page 2, paragraphs 34 page 3			6 and 12	
Y	US PG PuB 20050190746 (XIONG) 01 September 2005 (01.09.2005), paragraph 10 page 1 7 and 13			7 and 13	
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"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		Date of mailing of the international search report			
25 February 2008 (25.02.2008) Name and mailing address of the ISA/US Authorize				90	
Mail Stop PCT, Attn: ISA/US			Authorized officer		
Commissioner for Patents P.O. Box 1450		Hooman Houshmand Kina J			
Alexandria, Virginia 22313-1450					
racsimile No	Facsimile No. (571) 273-3201				

Form PCT/ISA/210 (second sheet) (April 2007)