



- (51) International Patent Classification:  
*G06Q 50/10* (2012.01)
- (21) International Application Number:  
PCT/US2012/039766
- (22) International Filing Date:  
26 May 2012 (26.05.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
13/117,862 27 May 2011 (27.05.2011) US
- (71) Applicant (for all designated States except US): **MICROSOFT CORPORATION** [US/US]; One Microsoft Way, Redmond, Washington 98052-6399 (US).
- (72) Inventors: **MURPHY, Brian, Scott**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **LATTA, Stephen, G.**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **BENNETT, Darren, Alexander**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US).

**GEISNER, Kevin**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **WRIGHT, Shawn, C.**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **MARKOVIC, Relja**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **DEAGUERO, Joel, B.**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **WILLOUGHBY, Christopher, H.**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **HASTINGS, Ryan, Lucas**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 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, QA, RO, RS, RU, RW, SC, SD,

[Continued on next page]

(54) Title: AVATARS OF FRIENDS AS NON-PLAYER-CHARACTERS

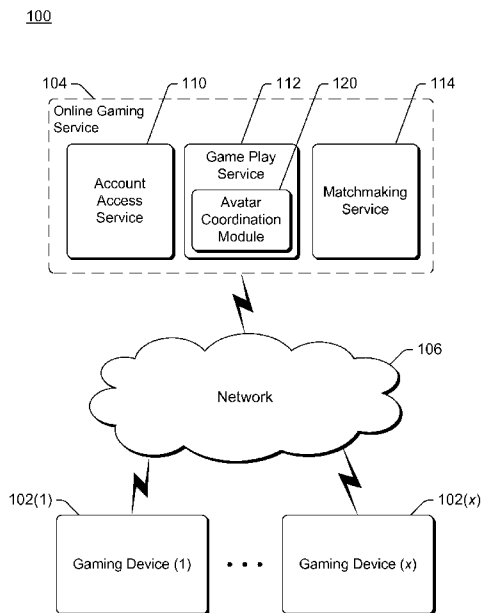


Fig. 1

(57) Abstract: In accordance with one or more aspects, for a particular user one or more other users associated with that particular user are identified based on a social graph of that particular user. An avatar of at least one of the other users is obtained and included as a non-player-character in a game being played by that particular user. The particular user can provide requests to interact with the avatar of the second user (e.g., calling out the name of the second user, tapping the avatar of the second user on the shoulder, etc.), these requests being invitations for the second user to join in a game with the first user. An indication of such an invitation is presented to the second user, which can, for example, accept the invitation to join in a game with the first user.

WO 2012/166676 A3

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, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, 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))

**Published:**

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

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

4 April 2013

**A. CLASSIFICATION OF SUBJECT MATTER****G06Q 50/10(2012.01)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)

G06Q 50/10; G06F 3/00; G06Q 30/00; A63F 9/24; G06Q 50/00; A63F 13/00

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) &amp; Keywords: social graph, game, non-player, invitation

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002-0086730 A1 (HITOSHI NAKAI) 04 July 2002 See abstract, paragraphs [0103]-[0113] and claims 1,7.	1-10
A	US 2009-0111576 A1 (OSTERGREN BRIAN et al.) 30 April 2009 See abstract and paragraphs [0039]-[0050].	1-10
A	US 2006-0121990 A1 (PATRICK W. O'KELLEY II et al.) 08 June 2006 See abstract, paragraphs [0046]-[0059] and claims 12,18,20.	1-10
A	KR 10-2005-0051985 A (POPCONSOFT CO., LTD.) 02 June 2005 See abstract, page 6 and figure 5.	1-10
A	KR 10-2009-0076319 A (NCSOFT CORPORATION) 13 July 2009 See abstract and page 6.	1-10
A	US 2008-0229215 A1 (BARON SAMUEL PIERCE et al.) 18 September 2008 See abstract and figure 1.	1-10

 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 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 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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

18 DECEMBER 2012 (18.12.2012)

Date of mailing of the international search report

**20 DECEMBER 2012 (20.12.2012)**

Name and mailing address of the ISA/KR

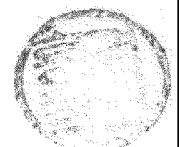
Korean Intellectual Property Office  
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan  
City, 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

HONG, Kyoung hee

Telephone No. 82-42-481-5781



**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2012/039766**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002-0086730 A1	04.07.2002	EP 1219330 A2	03.07.2002
		EP 1219330 A3	21.04.2004
		JP 2002-253865 A	10.09.2002
		JP 2002-253866 A	10.09.2002
		JP 2011-251168 A	15.12.2011
		JP 4920838 B2	10.02.2012
		JP 4922513 B2	10.02.2012
		JP 5001451 B2	25.05.2012
		US 2004-0224774 A1	11.11.2004
US 2009-0111576 A1	30.04.2009	CA 2698546 A1	30.04.2009
		CN 101835516 A	15.09.2010
		EP 2212001 A2	04.08.2010
		JP 2011-500277 A	06.01.2011
		KR 10-2010-0075516 A	02.07.2010
		WO 2009-055358 A2	30.04.2009
		WO 2009-055358 A3	30.04.2009
US 2006-0121990 A1	08.06.2006	JP 2006-158956 A	22.06.2006
		KR 10-2006-0064514 A	13.06.2006
		US 2006-0135264 A1	22.06.2006
		US 7677970 B2	16.03.2010
KR 10-2005-0051985 A	02.06.2005	None	
KR 10-2009-0076319 A	13.07.2009	None	
US 2008-0229215 A1	18.09.2008	WO 2008-112944 A1	18.09.2008