



(51) International Patent Classification:

G06F 3/01 (2006.01) G06F 17/30 (2006.01)
G06F 15/16 (2006.01)

(21) International Application Number:

PCT/US2015/032299

(22) International Filing Date:

22 May 2015 (22.05.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/002,706 23 May 2014 (23.05.2014) US
14/720,586 22 May 2015 (22.05.2015) 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, BN, 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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: CAUSING GESTURE RESPONSES ON CONNECTED DEVICES

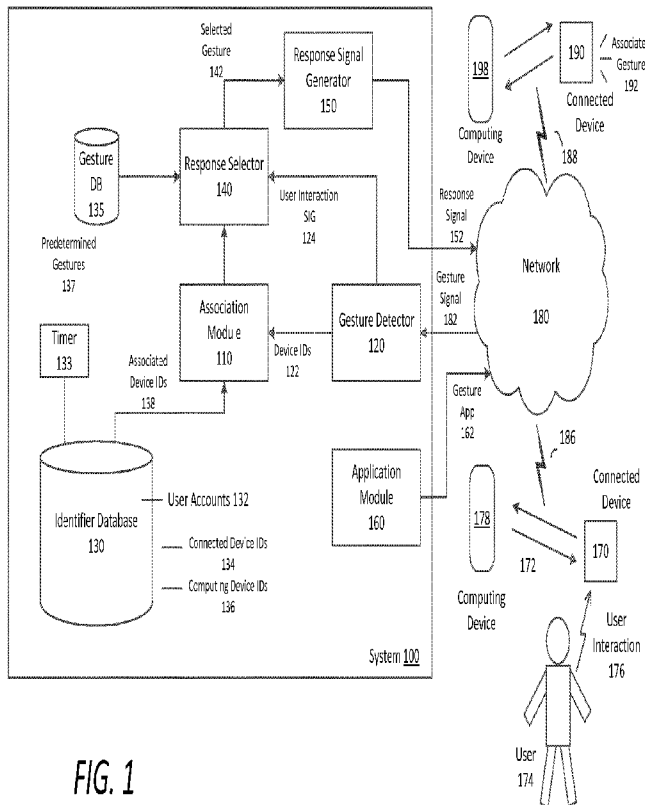


FIG. 1

(57) Abstract: A system and method to cause associated connected devices to perform gestures in response to user interactions with a connected device paired with the associated connected devices. The method includes receiving a gesture signal indicating a user interaction with a first connected device, identifying one or more connected devices associated with the first connected device, and, based on the user interaction, generating and transmitting a response signal to cause the one or more associated connected devices to perform a specified gesture signifying the user interaction with the first connected device.





GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, 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, KM, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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

7 July 2016

Published:

— *with international search report (Art. 21(3))*

A. CLASSIFICATION OF SUBJECT MATTER**G06F 3/01(2006.01)i, G06F 15/16(2006.01)i, G06F 17/30(2006.01)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)

G06F 3/01; G05B 19/02; G06F 3/00; G06F 13/38; H04L 9/00; H04W 4/20; G06F 3/041; G06F 21/00; G06F 15/16; G06F 17/30

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) & Keywords: pair, mobile, identifier, database, lookup, signal, interaction, connected device

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2012-0146918 A1 (BARRETT KREINER et al.) 14 June 2012 See paragraphs [0022]-[0027], [0033], [0044]; claims 1-4, 9, 13; and figures 1, 3.	1-20
Y	US 2014-0047143 A1 (LOGITECH EUROPE S.A.) 13 February 2014 See paragraphs [0043], [0074]; and figures 1, 6.	1-20
A	US 2011-0065417 A1 (IAN JAMES MCDONALD et al.) 17 March 2011 See paragraphs [0013]-[0033]; and figures 1-2.	1-20
A	WO 2013-093638 A2 (MASHINERY PTY LTD.) 27 June 2013 See paragraphs [0026], [0031]; and figures 3, 7.	1-20
A	US 2014-0098247 A1 (REKHA K. RAO et al.) 10 April 2014 See paragraphs [0077]-[0084]; and figure 5.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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"&" document member of the same patent family

Date of the actual completion of the international search

19 May 2016 (19.05.2016)

Date of mailing of the international search report

19 May 2016 (19.05.2016)

Name and mailing address of the ISA/KR

International Application Division

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2015/032299

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2012-0146918 A1	14/06/2012	US 2015-095786 A1 US 8937534 B2	02/04/2015 20/01/2015
US 2014-0047143 A1	13/02/2014	US 2014-043485 A1 US 2014-043493 A1 US 2014-043495 A1	13/02/2014 13/02/2014 13/02/2014
US 2011-0065417 A1	17/03/2011	CA 2666811 A1 EP 2082519 A1 EP 2082519 A4 WO 2008-046212 A1	24/04/2008 29/07/2009 17/03/2010 24/04/2008
WO 2013-093638 A2	27/06/2013	CA 2860114 A1 CN 104137029 A EP 2795428 A2 EP 2795428 A4 HK 1203656 A1 SG 11201403481 A US 2014-300540 A1 WO 2013-093638 A3	27/06/2013 05/11/2014 29/10/2014 17/02/2016 30/10/2015 30/07/2014 09/10/2014 15/08/2013
US 2014-0098247 A1	10/04/2014	None	