(19) World Intellectual Property Organization

International Bureau



(10) International Publication Number WO 2011/056143 A3

(43) International Publication Date 12 May 2011 (12.05.2011)

(51) International Patent Classification: G11B 31/00 (2006.01) G11B 19/02 (2006.01) H04N 5/765 (2006.01) G11B 33/00 (2006.01)

(21) International Application Number:

PCT/SG2009/000404

(22) International Filing Date:

4 November 2009 (04.11.2009)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): TCL THOMSON ELECTRONICS SINGAPORE PTE LTD [SG/SG]; 8 Jurong Town Hall Road, #28-01/06 The JTC Summit, Singapore 609434 (SG).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHOO, Hin Soon [MY/SG]; Blk 312 Sembawang Drive, #06-486, Singapore 750312 (SG). CHAN, Choon Meng [SG/SG]; 254 Kim Keat Avenue, Unit 10-106, Singapore 310254 (SG). WONG, Chew Heng [SG/SG]; Blk 118 Lorong1 Toa Payoh, #03-419, Singapore 310118 (SG).
- (74) Agent: GOH, Su Lin, Audrey; Viering, Jentschura & Partner LLP, P.O. Box 1088, Rochor Post Office, Rochor Road, Singapore 911833 (SG).

- (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, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

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

[Continued on next page]

(54) Title: A DIGITAL AUDIO-VIDEO ARRANGEMENT OF A DEVICE FOR DETERMINING CONNECTION OF ANOTH-ER DEVICE WITH THE DEVICE, AND A METHOD FOR DETERMINING CONNECTION OF A DEVICE WITH ANOTH-ER DEVICE

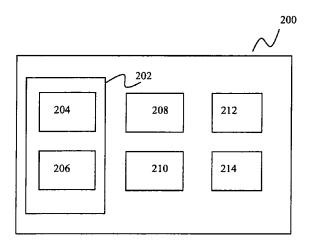


FIG. 2

(57) Abstract: Embodiments provide a digital audio-video arrangement of a device for determining connection of another device with the device, the digital audio-video arrangement comprising a digital audio-video interface which comprises a connecting port configured to connect with the other device, and an outputting circuit being coupled to the connecting port. The outputting circuit is configured to, when another device is connected with the device, output a signal at a first signal state, and when the other device is not connected with the device, output a signal at a second signal state. The digital audio-video arrangement may further comprise a first determining circuit being coupled to the outputting circuit, wherein the first determining circuit is configured to determine whether the signal state of the output signal from the outputting circuit has changed. The digital audio-video arrangement may further comprise a scanning circuit being coupled to the first determining circuit, wherein the scanning circuit is configured to scan the connection of the other device with the device.







(88) Date of publication of the international search report: $$10{\rm\ May}\ 2012$

INTERNATIONAL SEARCH REPORT

International application No.

PCT / SG 2009/000404

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G11B 31/00 (2006.01); H04N 5/765 (2006.01); G11B 19/02 (2006.01); G11B 33/00 (2006.01)

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)

G11B, H04N, G06F

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)

WPI; EPODOC; TXTEN; TXTDE; INSPEC; Internet

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim
		No.
Х	WO 2007064536 A1 (THOMSON LICENSING) 07 June 2007 (07.06.2007) Abstract; Figs. 1-5, 7, 8 and their associated descriptions; Page 2, line 28 to page 3, line 19; Page 5, lines 14 to 20; Page 6, line 15 to page 7, line 30; Page 8, line 12 to page 11, line 12; Claims 1 to 25	1, 2, 13, 23
A		3-12, 14-22
A	US 2003215120 A1 (MARLOWE, IRA et al.) 20 November 2003 (20.11.2003) Abstract; Figs. 1, 2a, 4-6 and their associated descriptions; Paragraphs 4-12; Claims 1 to 54	1-23
A	US 2004151327 A1 (MARLOW, IRA) 05 August 2004 (05.08.2004) See entire document	1, 13, 23
A	JP 2004260850 A (NIKON GIJUTSU KOBO KK et al.) 16 September 2004 (16.09.2004) Abstract; Fig. 3, 4; Claims	1, 13, 23

Further documents are listed in the continuation of Box C.	X See patent family annex.				
* Special categories of cited documents:	"T" later document published after the international filing date				
	or priority date and not in conflict with the application but cited				
"A" document defining the general state of the art which is not considered to be of particular relevance	to understand the principle or theory underlying the invention				
	"X" document of particular relevance; the claimed invention				
"E" earlier application or patent but published on or after the	cannot be considered novel or cannot be considered to involve				
international filing date	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	F				
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	Date of mailing of the international search report				
14 March 2012 (14.03.2012)	16 March 2012 (16.03.2012)				
Name and mailing address of the ISA/AT	Authorized officer				
Austrian Patent Office Dresdner Straße 87, A-1200 Vienna	KÖGL C.				
Facsimile No. +43 / 1 / 534 24-535	Telephone No. +43 / 1 / 534 24-44()				

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT / SG 2009/000404

	Patent docu in search			Patent fami member(s		Publication date
WO	Al	2007064536	CN	A	101322194	2008-12-10
			EP	A1	1955330	2008-08-13
			JP	A.	2009517983	2009-04-30
			KR	Α	20080074918	2008-08-13
			US	A 1	2010153607	2010-06-17
			WO	A1	2007064536	2007-06-07
US	A1	2003215120	CN	A	1504931	2004-06-16
			CN		1504931B	2010-05-12
			CN	В	1504931	2010-05-12
			DE	A1	10321722	2003-12-18
			EP	A2	1426903	2004-06-09
			EP	A3	1426903	2006-02-08
			FR	A1	2839797	2003-11-21
			FR	B1	2839797	2011-04-29
			JР	Α	2004000609	2004-01-08
			JP JP	D2	4354737B2	2009-10-28
				B2	4354737	2009-10-28
			JP KR	A A	2004174232	2004-06-24
			US.	A Al	20040047561	2004-06-05
			US	B2	2003215119 7263214	2003-11-20 2007-08-28
			US	A1	2003215120	2007-08-28
			US	B2	7295691	2007-11-13
			US	A1	2008031507	2008-02-07
			US	B2	7796795	2010-09-14
US	A1	2004151327	AU	Al	2003297898	2004-06-30
		200.12.22.	AU		2003297898B	2011-01-27
			AU	B2	2003297898	2011-01-27
			AU	A1	2006200895	2006-09-21
			CA	A 1	2538053	2006-09-03
			CN	Α	1866386	2006-11-22
			EP	Al	1586049	2005-10-19
			EP	A 4	1586049	2009-07-29
			EP	A2	1698518	2006-09-06
			EP	A2	2041879	2009-04-01
			JР	Α	2006321470	2006-11-30
			JP	Α	2010092015	2010-04-22
			KR	Α	20060096361	2006-09-11
			MX	Α.	PA06002421	2006-09-25
			RU	A	2006101060	2006-06-10
			RU	C2	2400808	2010-09-27
			RU	A	2006106488	2007-10-10
	•		SG	A1	125244	2006-09-29
			SG	A 1	147463	2008-11-28
			TW	~	I281895B	2007-06-01
			TW	В	I281895	2007-06-01
			US	A1	2003215102	2003-11-20
			US	B2	7489786	2009-02-10
			US	A1	2004151327	2004-08-05
			US	A1	2005239434	2005-10-27
			US	A1	2007015486	2007-01-18
			US	A1	2007293183	2007-12-20
			US	Al	2008118079	2008-05-22
			US	A1	2008130912	2008-06-05
			US	A1	2008246850	2008-10-09
			US	A1	2008247563	2008-10-09
			US	Al	2008247576	2008-10-09
			WO	A1	2004053722	2004-06-24
			***	. ~	000000000	0000 00 00
,			WO WO	A2 A3	2006094281 2006094281	2006-09-08 2007-11-22

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT / SG 2009/000404

		mornation on patent tanning memoria			PCT / SG 2009/000404		
			WO WO	A2 A3	2008002954 2008002954	2008-01-03 2008-11-27	
JP	A	2004260850	JP	A	2004260850	2004-09-16	
		•					
					•		
					·		
							•
						,	
		·					