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Ohkita

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(54) **APPARATUS AND METHOD OF RECEIVING DATA FROM AUDIO/VIDEO EQUIPMENT**

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(51) **Int. Cl.**

G06F 3/00 (2006.01)

G06F 13/12 (2006.01)

G06F 7/04 (2006.01)

(52) **U.S. Cl.** **710/14; 710/8; 710/36; 710/62; 726/2**

(58) **Field of Classification Search** None
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2004/0239816	A1 *	12/2004	Ando	348/705
2006/000177	A1	1/2006	Salzano et al.		
2007/0036158	A1	2/2007	Hun-Kwon et al.		
2007/0055876	A1	3/2007	Choi		
2007/0057931	A1	3/2007	Takamori		

FOREIGN PATENT DOCUMENTS

EP	1761052	A2	3/2007
JP	2004-357029		12/2004
JP	2006-203725		8/2006
JP	2006-350919		12/2006
JP	2007-078980		3/2007
JP	2007-134956		5/2007
WO	2007/049556	A1	5/2007

OTHER PUBLICATIONS

International Search Report and Written Opinion for PCT application No. PCT/JP2008/061599 dated Sep. 9, 2008.

High-Definition Multimedia Interface, Specification Version 1.3a; HDMI Licensing, LLC; Nov. 10, 2006.

State Intellectual Property Office of P.R.C. application No. 20088000481.9, Notification of the First Office Action, mailed Apr. 29, 2010 (English translation).

"Extended European Search Report Dated Oct. 7, 2010", European Patent Application No. 08777611.8.

"High-Definition Multimedia Specification, specification version 1.3", Jun. 22, 2006, XP030001519.

* cited by examiner

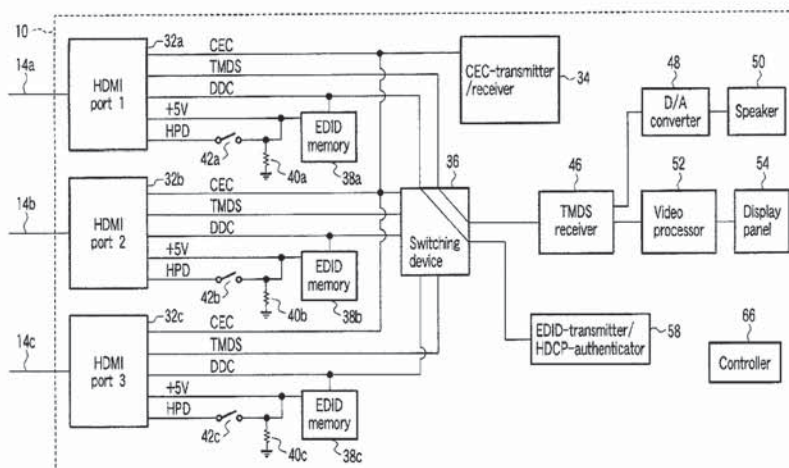
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(57) **ABSTRACT**

According to one embodiment, a data receiver apparatus comprises input ports complying with a digital interface standard, wherein each input port comprises a voltage signal terminal receiving a prescribed voltage signal, a detection terminal outputting a connection detection signal, a data input terminal receiving a data signal, and an address terminal transmitting a physical address. A nonvolatile memory is connected to the address terminal. A connection detection signal output from the detection terminal is set to a detection-state voltage irrespective of whether the data input terminal is selected.

9 Claims, 4 Drawing Sheets



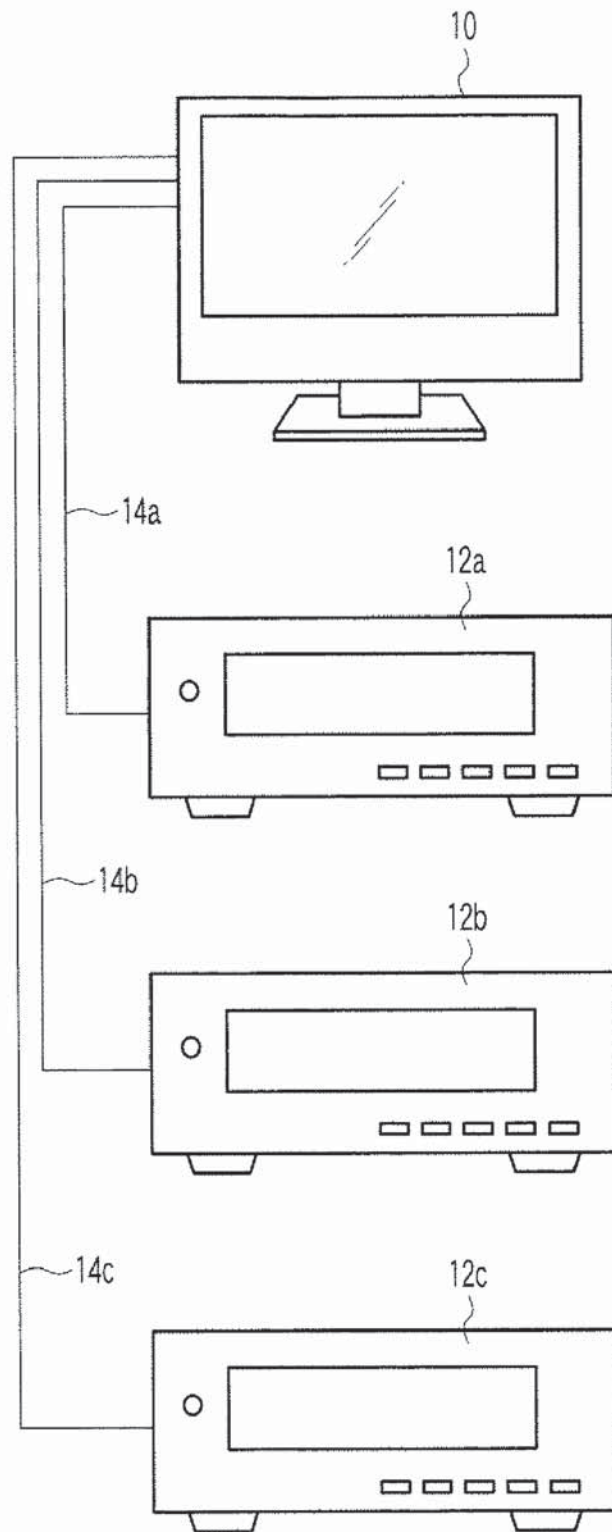


FIG. 1

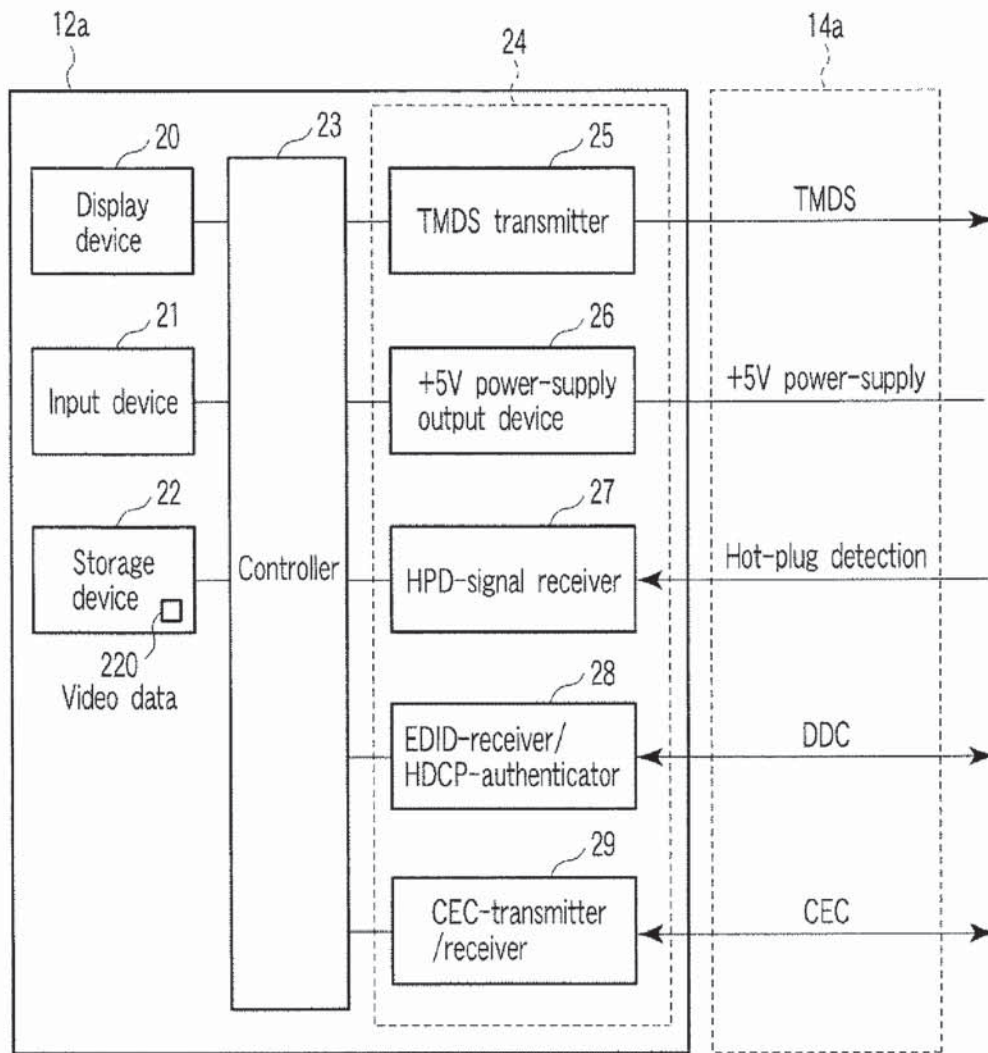


FIG. 2

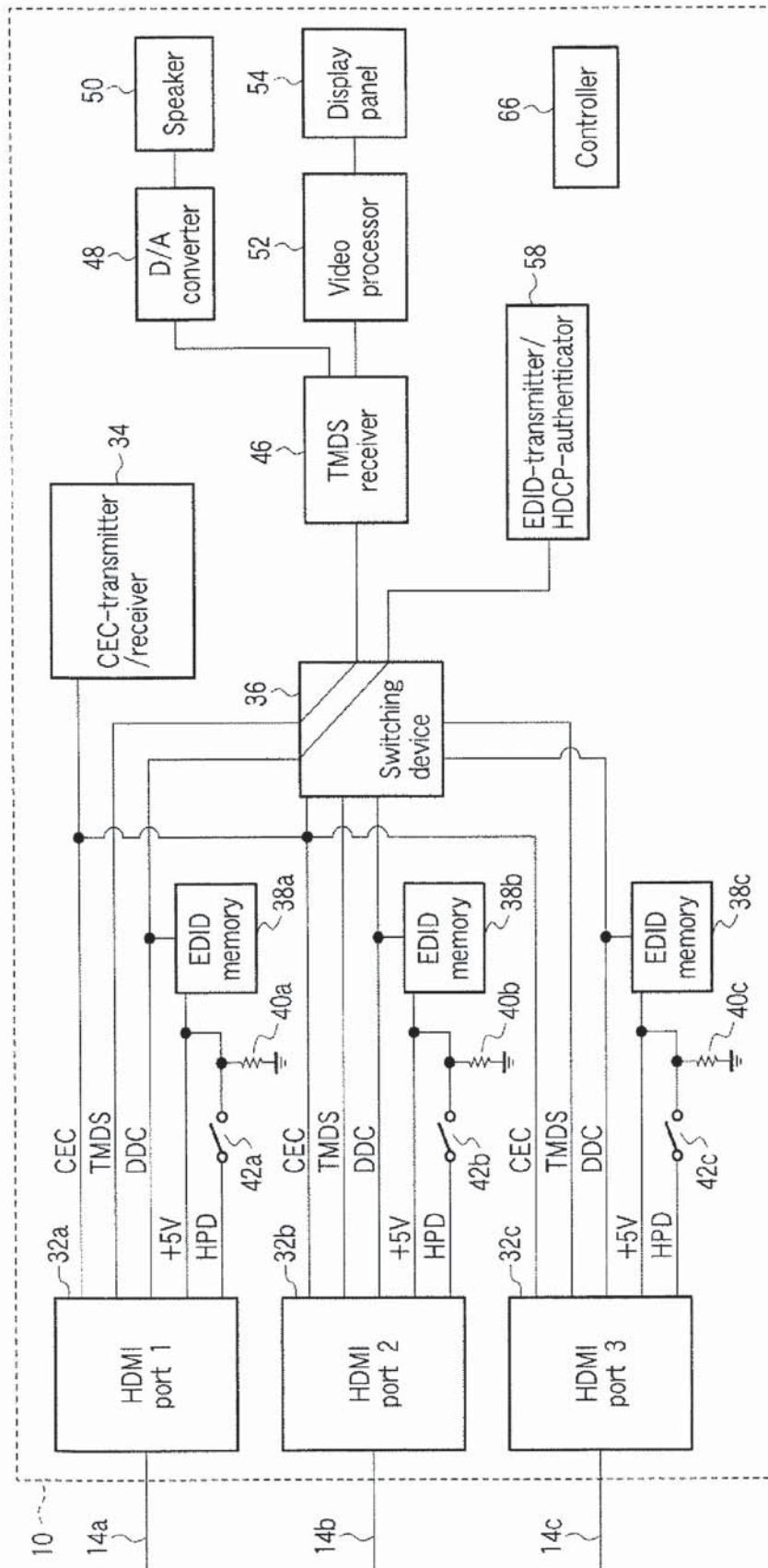
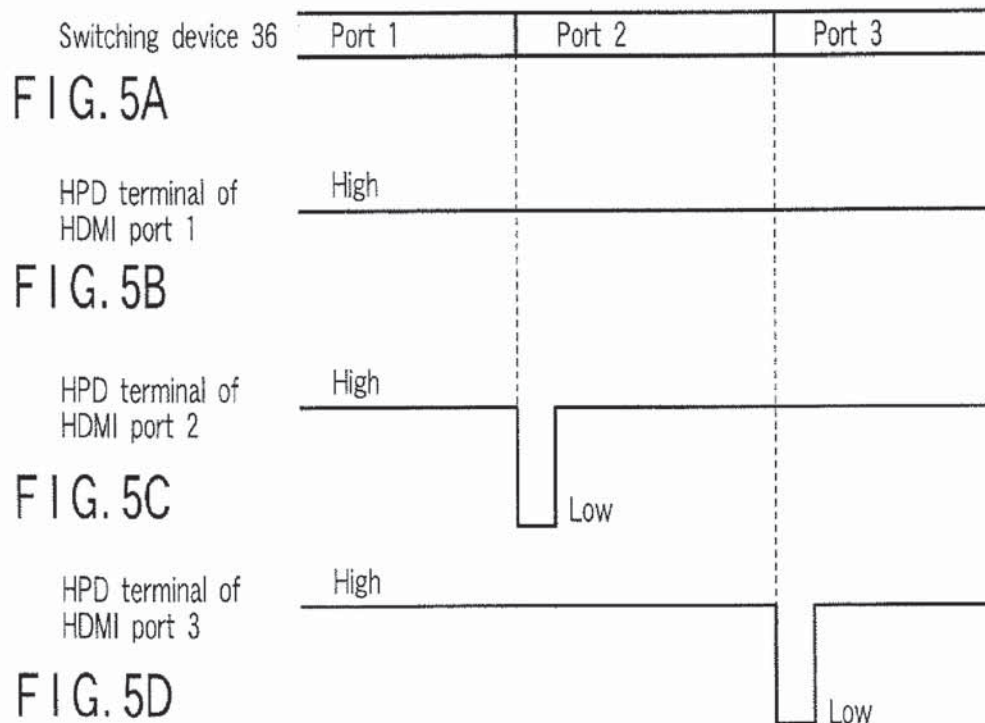


FIG. 3

State of the sink apparatus Terminals of the sink apparatus	Standby	On	
		HDMI not selected	HDMI selected
HPD potential	High	High	High
EDID reading	OK	OK	OK
HDCP authentication	NG	NG	OK
TMD5 potential	Low	Low	High

FIG. 4



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