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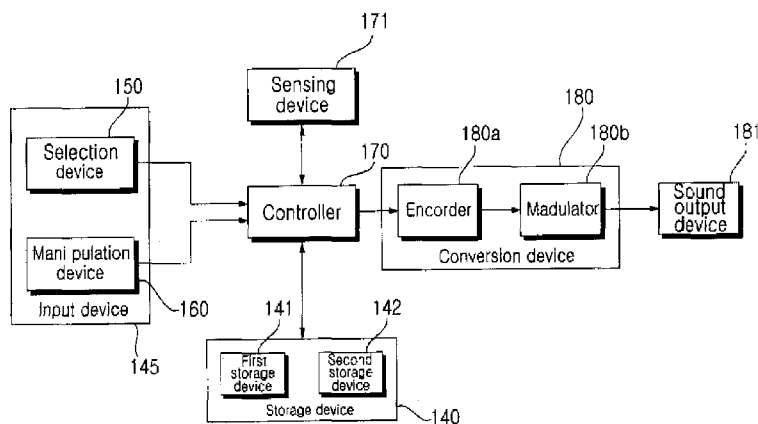
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(54) Title: HOME APPLIANCE AND HOME APPLIANCE SYSTEM



[Fig. 2]



(57) Abstract: A home appliance and a home appliance system are disclosed. Product information and status information of the home appliance are converted into at least one transmission acoustic signal, and a sound corresponding to the at least one transmission acoustic signal is output to the outside. The product information and status information are formed as a digital signal and stored in a storage device. The digital signal is encoded through a conversion device, and converted into at least one transmission acoustic signal. The at least one transmission acoustic signal is formed as an analog signal. Meanwhile, the at least one transmission acoustic signal can be dividedly formed.

## INTERNATIONAL SEARCH REPORT

International application No.  
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<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
<i>H04M 11/00(2006.01)i, H04M 11/06(2006.01)i</i>		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) H04M 11/00; A47L 15/46; G05B 19/414; G08B 23/00; G10L 21/02; H04N 5/44; H04R 3/00		
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 since 1975. Japanese utility models and applications for utility models since 1975.		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords:"acoustic signal, separation signal, home appliance, conversion, dummy time, melody, buzzer sound, management device, fault diagnosis, product information, status information"		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2007-267956 A (MATSUSHITA ELECTRIC IND CO LTD) 18 October 2007 See abstract; figures 3-4; paragraphs 30-42; claims 1, 4, 5;	1,5,6,12-14
A	KR 10-0127232 B1 (LG ELECTRONICS CORP.) 29 December 1997 See abstract; figure 4; pages 2-3; claim 1;	1-48
A	JP 2008-003562 A (ALPINE ELECTRONICS INC) 10 January 2008 See figures 1, 4; paragraphs 15-17, 33, 34; claim 1;	1-48
A	US 5757643 A1 (KURODA; KIYOMITSU et al.) 26 May 1998 See abstract; figures 1-3; column 3, line 46-column 5, line 56; claims 1, 3;	1-48
A	US 5506892 A1 (KOJIMA; TAKASHI et al.) 09 April 1996 See abstract; figures 1, 2, 8; column 4, line 49-column 5, line 50; claim 1;	1-48
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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 "&" document member of the same patent family		
Date of the actual completion of the international search 30 DECEMBER 2009 (30.12.2009)		Date of mailing of the international search report <b>04 JANUARY 2010 (04.01.2010)</b>
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Information on patent family members

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