



(11)

EP 1 061 774 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
05.07.2006 Bulletin 2006/27

(51) Int Cl.:
H04S 1/00 (2006.01)

(43) Date of publication A2:
20.12.2000 Bulletin 2000/51

(21) Application number: **00111950.2**

(22) Date of filing: **15.06.2000**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **15.06.1999 JP 16902299**

(71) Applicant: **YAMAHA CORPORATION**
Hamamatsu-shi
Shizuoka-ken (JP)

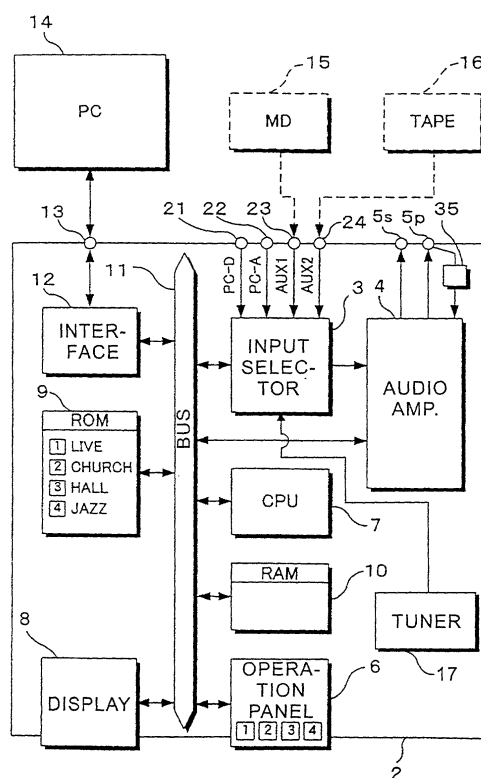
(72) Inventors:
• **Katayama, Masaki**
Hamamatsu-shi,
Shizuoka (JP)
• **Fujimura, Yasuhiro**
Hamamatsu-shi,
Shizuoka (JP)

(74) Representative: **Geyer, Ulrich F. et al**
WAGNER & GEYER,
Patentanwälte,
Gewürzmühlstrasse 5
80538 München (DE)

(54) Audio system having a sound field processor

(57) An audio system comprises: a sound field processor that performs three-dimensional sound field process for a headphone to an input signal and outputs a processed signal; a loudspeaker output device that receives an input signal and outputs amplified signal to a loudspeaker; a headphone output device that receives either an input signal or the processed signal, outputs either said input signal or said processed signal as amplified signal to a headphone and is capable of being connected to said sound field processor: a headphone connector connected to said headphone output device; a headphone detector that is operably coupled to said headphone connector and detects whether a headphone is connected to said headphone connector or not; and a switch controller that is operably coupled to said headphone detector and said sound field processor, and makes said sound field processor perform said three-dimensional sound field process for a headphone and supply the processed signal to said headphone output device when said headphone detector detects a headphone.

FIG. 1





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 11 1950

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 0 808 075 A (CENTRAL RESEARCH LABORATORIES LIMITED; CREATIVE TECHNOLOGY LTD) 19 November 1997 (1997-11-19) * column 1, lines 3-5 *	1,3	INV. H04S1/00
A	* column 2, lines 32-51 * * column 3, lines 6-25 * * column 3, line 43 - column 4, line 51 * * column 4, line 55 - column 6, line 52 * -----	2,4-6	
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 595 (E-1630), 14 November 1994 (1994-11-14) -& JP 06 225243 A (HITACHI LTD), 12 August 1994 (1994-08-12) * abstract *	1-6	
A	----- PATENT ABSTRACTS OF JAPAN vol. 1998, no. 06, 30 April 1998 (1998-04-30) -& JP 10 039869 A (KAWAI MUSICAL INSTR MFG CO LTD), 13 February 1998 (1998-02-13) * abstract * -----	1-6	TECHNICAL FIELDS SEARCHED (IPC) H04S H04R H04B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 May 2006	Examiner Zanti, P
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

1
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 11 1950

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-05-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0808075	A	19-11-1997	JP 10070789 A	10-03-1998
			US 5917916 A	29-06-1999

JP 06225243	A	12-08-1994	NONE	

JP 10039869	A	13-02-1998	NONE	
