

Title (en)  
Information apparatus having speakers

Title (de)  
Informationsvorrichtung mit Lautsprecher

Title (fr)  
Dispositif d'information avec haut-parleur

Publication  
**EP 1133211 A2 20010912 (EN)**

Application  
**EP 01301842 A 20010228**

Priority  
JP 2000060209 A 20000306

Abstract (en)  
In an information apparatus having speakers, an inspection signal of the frequency out of the audible frequency band outputted from the microcomputer 23 is inputted into the input terminal 14a of power IC 10a via the input switch circuit 22, a signal to be inspected, which is outputted to the ripple terminal 13a of power IC 10a according to the inspection signal, is extracted by the extracting circuit 20a, and it is judged by an intensity of the output signal outputted from the extracting circuit 20a whether or not speaker FLS is connected to the amplifier 12a. <IMAGE>

IPC 1-7  
**H04R 5/04**

IPC 8 full level  
**H04R 3/00** (2006.01); **H04R 5/04** (2006.01); **H04R 29/00** (2006.01)

CPC (source: EP)  
**H04R 5/04** (2013.01); **H04R 2420/05** (2013.01)

Cited by  
FR2954510A1; CN102656904A; CN107708037A; US9131306B2; WO03061333A3; WO2011072795A1

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