

Title (en)  
Speaker and speaker device

Title (de)  
Lautsprecher und Lautsprechergerät

Title (fr)  
Haut-parleur et dispositif à haut-parleur

Publication  
**EP 0991295 A2 20000405 (EN)**

Application  
**EP 99402359 A 19990928**

Priority  
JP 27302898 A 19980928

Abstract (en)  
A speaker has a very small size and is arranged to emit sound waves in a non-directional manner. The speaker includes a case (12) and a speaker unit (16) attached to a plate (14) provided at an opening of the case (12). The speaker is arranged so that the speaker unit (16) is mounted or attached to a floor or support surface such that a space formed by the case (12), the plate (14) and the speaker unit (16) is airtight and so that the back-and-forth motion of a vibrator of the speaker unit (16) generates expansion and contraction of the case (12).

IPC 1-7  
**H04R 1/02**

IPC 8 full level  
**H04R 1/00** (2006.01); **H04R 1/02** (2006.01); **H03F 3/181** (2006.01); **H04R 1/28** (2006.01)

CPC (source: EP)  
**H04R 1/2834** (2013.01)

Cited by  
CN104205870A; US8561756B2; US8798308B2; WO2013126332A1; US11962972B2

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0991295 A2 20000405; EP 0991295 A3 20060719**; JP 2000102082 A 20000407

DOCDB simple family (application)  
**EP 99402359 A 19990928**; JP 27302898 A 19980928