

Title (en)

PANEL FORM ACOUSTIC APPARATUS USING BENDING WAVES MODES

Title (de)

PLATTENFÖRMIGE AKUSTISCHE VORRICHTUNG UNTER VERWENDUNG VON BIEGEWELLENMODEN

Title (fr)

DISPOSITIF ACOUSTIQUE EN FORME DE PANNEAU UTILISANT DES MODES A ONDES DE FLEXION

Publication

EP 1110426 B1 20040225 (EN)

Application

EP 99941742 A 19990901

Priority

- GB 9902724 W 19990901
- GB 9818959 A 19980902

Abstract (en)

[origin: WO0015000A1] A panel form acoustic member capable of supporting bending wave vibration has the bending wave velocity varied in the region of coincidence to provide a range of coincidence frequencies, for causing the acoustic coupling of the bending waves in the panel to occur over a broader range of angles or for making the coupling more uniform. The member may be incorporated in a loudspeaker having a panel member (1) and an exciter (3) fixed to the panel member to excite bending waves in the loudspeaker to cause an acoustic output.

IPC 1-7

H04R 7/04; H04R 7/06; G10K 15/08

IPC 8 full level

H04R 7/04 (2006.01)

CPC (source: EP KR)

H04R 7/045 (2013.01 - EP); **H04R 7/06** (2013.01 - KR); **H04R 7/04** (2013.01 - EP)

Cited by

DE102014012327B3; EP3101911A1; EP2988524A1; WO2006000751A1; WO2023247017A1; EP3101911B1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0015000 A1 20000316; AR 020361 A1 20020508; AT E260534 T1 20040315; AU 5524299 A 20000327; BG 105261 A 20010831; BR 9913391 A 20010522; CA 2342764 A1 20000316; CN 1157998 C 20040714; CN 1317220 A 20011010; DE 69915083 D1 20040401; DE 69915083 T2 20041014; EA 002629 B1 20020829; EA 200100303 A1 20010827; EP 1110426 A1 20010627; EP 1110426 B1 20040225; GB 9818959 D0 19981021; HK 1034407 A1 20011019; HU P0103191 A2 20011228; ID 28655 A 20010621; IL 141634 A0 20020310; JP 2002524994 A 20020806; KR 20010074943 A 20010809; NO 20011080 D0 20010302; NO 20011080 L 20010502; PE 20001147 A1 20001106; PL 346418 A1 20020211; SK 2842001 A3 20010911; TR 200100682 T2 20011022; TW 465252 B 20011121; UY 25689 A1 19991117; YU 17201 A 20030707; ZA 200100759 B 20010827

DOCDB simple family (application)

GB 9902724 W 19990901; AR P990104362 A 19990831; AT 99941742 T 19990901; AU 5524299 A 19990901; BG 10526101 A 20010216; BR 9913391 A 19990901; CA 2342764 A 19990901; CN 99810574 A 19990901; DE 69915083 T 19990901; EA 200100303 A 19990901; EP 99941742 A 19990901; GB 9818959 A 19980902; HK 01104675 A 20010707; HU P0103191 A 19990901; ID 20010334 A 19990901; IL 14163499 A 19990901; JP 2000569609 A 19990901; KR 20017002788 A 20010302; NO 20011080 A 20010302; PE 00088499 A 19990902; PL 34641899 A 19990901; SK 2842001 A 19990901; TR 200100682 T 19990901; TW 88114630 A 19990826; UY 25689 A 19990901; YU 17201 A 19990901; ZA 200100759 A 20010126