

Title (en)

Ultrasonic parametric speaker system

Title (de)

Ultraschallbasiertes parametrisches Lautsprechersystem

Title (fr)

Système de haut-parleur paramétrique d'ultrason

Publication

**EP 1248491 B1 20060531 (DE)**

Application

**EP 02007545 A 20020403**

Priority

DE 10117529 A 20010407

Abstract (en)

[origin: EP1248491A2] An AM modulator (20) places an original audio signal (10) in a frequency range right (11) and left (12) alongside a carrier frequency. An ultrasonic modulator has a transmission function (30) with a maximum transmission at a frequency ( $f_0$ ), to which the carrier frequency is tuned. Two sidebands are emitted corresponding to the transmission function of the modulator. An Independent claim is also included for a device for triggering a parametric loudspeaker system.

IPC 8 full level

**H04R 1/32** (2006.01); **H04R 3/00** (2006.01); **H04R 1/40** (2006.01); **H04R 17/10** (2006.01)

CPC (source: EP US)

**H04R 1/323** (2013.01 - EP US); **H04R 17/10** (2013.01 - EP US); **H04R 2217/03** (2013.01 - EP US)

Cited by

US9780753B2; WO2016073362A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**EP 1248491 A2 20021009**; **EP 1248491 A3 20040107**; **EP 1248491 B1 20060531**; AT E328455 T1 20060615; DE 10117528 A1 20030206; DE 10117528 B4 20040401; DE 50206958 D1 20060706; JP 2002315088 A 20021025; US 2002172375 A1 20021121; US 7181025 B2 20070220

DOCDB simple family (application)

**EP 02007545 A 20020403**; AT 02007545 T 20020403; DE 10117528 A 20010407; DE 50206958 T 20020403; JP 2002105718 A 20020408; US 11863002 A 20020408