

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 (f₀), 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