

Title (en)
LOUDSPEAKER LINE ARRAY CONFIGURATIONS AND RELATED SOUND PROCESSING

Title (de)
KONFIGURATIONEN VON LINE-ARRAY-LAUTSPRECHERSYSTEMEN UND ENTSPRECHENDE SCHALLVERARBEITUNG

Title (fr)
CONFIGURATIONS D'AGENCEMENT EN LIGNE DE HAUT-PARLEURS, ET TRAITEMENT DE SON S'Y RAPPORTANT

Publication
EP 2082611 B8 20111005 (EN)

Application
EP 07874421 A 20071016

Priority
• US 2007081570 W 20071016
• US 82964006 P 20061016

Abstract (en)
[origin: US2008212805A1] A sound reproduction system includes one or more arrays of drive units, coupled with sound processing allowing improved steerability, directional control, width control, and/or beam overlay. A speaker column may comprise two arrays facing one another, the drive units being perpendicular to the speaker unit front, with the acoustic output of each line array being compressed, turned and output from an elongate slot. The drive units may be staggered with respect to those in the opposing array. The arrays may be arc-shaped else straight. Selective delays to simulate an arced pattern. Differential delays applied to the drive units in a sub-array allow beam steering. Additional drive units, such as high frequency drivers, may be added along the length of the elongate slot or elsewhere to increase the dynamic frequency range of the speaker system. A collocated sound processor and amplifier output stage may be integrated with the speaker unit.

IPC 8 full level
H04R 1/26 (2006.01); **H04R 1/40** (2006.01)

CPC (source: EP US)
H03G 3/004 (2013.01 - EP US); **H03G 3/007** (2013.01 - EP US); **H04R 1/26** (2013.01 - EP US); **H04R 1/403** (2013.01 - US);
H04R 3/12 (2013.01 - EP US); **H04R 29/00** (2013.01 - EP US); **H04R 2420/09** (2013.01 - EP US); **H04R 2499/13** (2013.01 - EP US);
H04R 2499/15 (2013.01 - EP US)

Cited by
CN103281651A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2008212805 A1 20080904; US 8135158 B2 20120313; AT E514290 T1 20110715; CA 2709655 A1 20080925; CA 2709655 C 20160405;
EP 2082611 A2 20090729; EP 2082611 B1 20110622; EP 2082611 B8 20111005; EP 2389011 A2 20111123; EP 2389011 A3 20130130;
EP 2389011 B1 20170927; ES 2368281 T3 20111116; ES 2653671 T3 20180208; TW 200838347 A 20080916; TW I477158 B 20150311;
US 2013034251 A1 20130207; US 9414152 B2 20160809; WO 2008115284 A2 20080925; WO 2008115284 A3 20081113

DOCDB simple family (application)
US 87338307 A 20071016; AT 07874421 T 20071016; CA 2709655 A 20071016; EP 07874421 A 20071016; EP 11170598 A 20071016;
ES 07874421 T 20071016; ES 11170598 T 20071016; TW 96138769 A 20071016; US 2007081570 W 20071016; US 201213366215 A 20120203