

Title (en)  
Active and passive directional acoustic radiating

Title (de)  
Aktive und passive akustische Richtstrahlung

Title (fr)  
Rayonnement acoustique directionnel actif et passif

Publication  
**EP 2604045 B1 20150708 (EN)**

Application  
**EP 11757441 A 20110811**

Priority  
• US 85498210 A 20100812  
• US 85500010 A 20100812  
• US 2011047429 W 20110811

Abstract (en)  
[origin: WO2012021713A1] An three-way audio system that uses directional arrays for radiating mid frequency acoustic energy and passive directional devices to radiate the high frequencies. The system includes a left channel, a right channel, and a center channel. A crossover network separates the left channel and the right channel into low frequency content, midrange frequency content, and high frequency content. An omnidirectional acoustical device radiates acoustic energy corresponding to the low frequency content of the combined left channel, right channel and center channel. A first directional array, comprising signal processing circuitry and more than one acoustic driver, radiates acoustic energy corresponding to the midrange content of one of the left channel and right channel signal so that more acoustic energy corresponding to the midrange content of one of the left channel signal and the right channel signal is radiated laterally than in other directions. A first passive directional device, radiates acoustic energy corresponding to the high frequency content of the one of the left channel and right channel signal so that more acoustic energy corresponding to the high frequency content of the one of the left channel signal and the right channel signal is radiated laterally than in other directions.

IPC 8 full level  
**H04R 3/12** (2006.01); **H04R 1/26** (2006.01); **H04R 1/28** (2006.01); **H04R 3/14** (2006.01); **H04S 3/00** (2006.01)

CPC (source: EP)  
**H04R 3/12** (2013.01); **H04R 3/14** (2013.01); **H04R 1/26** (2013.01); **H04R 1/2811** (2013.01); **H04R 1/2834** (2013.01); **H04R 1/2857** (2013.01); **H04R 1/2876** (2013.01); **H04R 2430/03** (2013.01); **H04R 2499/15** (2013.01); **H04S 3/002** (2013.01)

Cited by  
EP3529797A4; EP3745711A4; EP3448058A1; CN109429027A; KR20190021602A; US11051103B2; WO2018072198A1; US11151972B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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