

Title (en)  
DIRECTIONAL ACOUSTIC DEVICE

Title (de)  
AKUSTISCHE VORRICHTUNG MIT RICHTWIRKUNG

Title (fr)  
DISPOSITIF ACOUSTIQUE DIRRECTIF

Publication  
**EP 3510790 B1 20211110 (EN)**

Application  
**EP 16767500 A 20160912**

Priority  
US 2016051271 W 20160912

Abstract (en)  
[origin: WO2018048438A1] A directional acoustic device with an acoustic source or an acoustic receiver and a conduit to which the acoustic source or acoustic receiver is acoustically coupled and within which acoustic energy travels in a propagation direction from the acoustic source or to the acoustic receiver. The conduit has a radiating portion that has a radiating surface with leak openings that define controlled leaks through which acoustic energy radiated from the source into the conduit can leak to the outside environment or through which acoustic energy in the outside environment can leak into the conduit. The radiating surface has a thin sheet with openings through the sheet, and a cover material with a greater acoustic resistance than an acoustic resistance of an opening. The cover material covers at least parts of at least some of the openings, to define controlled acoustic leaks into or out of the conduit.

IPC 8 full level  
**H04R 1/34** (2006.01)

CPC (source: EP)  
**H04R 1/342** (2013.01); **H04R 1/345** (2013.01); **H04R 1/28** (2013.01)

Citation (examination)  
EP 3278570 A1 20180207 - BOSE CORP [US]

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

DOCDB simple family (publication)  
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**US 2016051271 W 20160912**; CN 201680090407 A 20160912; EP 16767500 A 20160912; JP 2019513980 A 20160912