

Title (en)

ACOUSTIC ATTENUATION DEVICE FOR PROPAGATED SOUND THROUGH SURFACES

Title (de)

SCHALLDÄMPFUNGSVORRICHTUNG FÜR SICH DURCH OBERFLÄCHEN AUSBREITENDEN SCHALL

Title (fr)

DISPOSITIF D'ATTÉNUATION ACOUSTIQUE POUR UN SON PROPAGÉ PAR DES SURFACES

Publication

**EP 3928311 B1 20240417 (EN)**

Application

**EP 20705716 A 20200220**

Priority

- IT 201900002569 A 20190222
- EP 2020054439 W 20200220

Abstract (en)

[origin: WO2020169711A1] The present invention relates to an acoustic attenuation device (100) for propagated sound through surfaces. The acoustic attenuation device is of the layered type and comprises an innermost connection layer (101), adapted to associate the acoustic attenuation device (100) with at least one surface. The acoustic attenuation device (100) further comprises an intermediate layer (102), comprising a plurality of attenuation modules (103), each of which comprises at least one movable element (201) defined by at least one first opening (202), the at least one movable element (201) being adapted to vibrate relative to the at least one first opening (202) in a resonant manner when hit by the propagated sound, to attenuate the propagated sound by mechanical dissipation. The acoustic attenuation device (100) further comprises an outermost layer (104), comprising at least one closure surface (105) defining at least one cavity (301) facing the movable elements (201) and adapted to encapsulate the movable elements (201) of the attenuation modules (103) of the intermediate layer (102), to further attenuate the propagated sound by sound-absorbing effect.

IPC 8 full level

**G10K 11/172** (2006.01); **G10K 11/168** (2006.01)

CPC (source: EP)

**G10K 11/168** (2013.01); **G10K 11/172** (2013.01)

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)

**WO 2020169711 A1 20200827**; EP 3928311 A1 20211229; EP 3928311 B1 20240417; EP 3928311 C0 20240417; IT 201900002569 A1 20200822

DOCDB simple family (application)

**EP 2020054439 W 20200220**; EP 20705716 A 20200220; IT 201900002569 A 20190222