Title (en)

COMPOUND SOUND ABSORPTION DEVICE WITH BUILT-IN RESONANT CAVITY

Title (de)

VERBUNDSCHALLABSORPTIONSVORRICHTUNG MIT EINGEBAUTEM RESONANZHOHLRAUM

Title (fr)

DISPOSITIF COMPOSITE D'ABSORPTION DES SONS COMPRENANT UNE CAVITÉ RÉSONNANTE INCORPORÉE

Publication

EP 2487677 B1 20200304 (EN)

Application

EP 10841854 A 20101014

Priority

- CN 201010001223 A 20100108
- CN 2010001613 W 20101014

Abstract (en)

[origin: EP2487677A1] The composite sound-absorbing device of the present invention includes a perforated board having a number of first pores thereon, a back board and side boards, the perforated board, back board and side boards forming a closed cavity, wherein: at least one or more of the resonant cavities being located within the closed cavity; at least one or more of second pores being located on the resonant cavities; at least one of the second pores being connected with the closed cavity; the resonant cavity having a volume of V=10mm 3 -1×10 10 mm 3 , having a thickness of 0.05mm-10mm, the second pores having an aperture of d'=0.05-100mm, with a perforation rate Ã'=0.01%-30%. The present invention is beneficial to improve the effect of sound-absorbing and expand the frequency band of sound-absorbing.

IPC 8 full level

E04B 1/86 (2006.01); **G10K 11/172** (2006.01)

CPC (source: EP)

E04B 1/86 (2013.01); **G10K 11/172** (2013.01); E04B 2001/8428 (2013.01); E04B 2001/8452 (2013.01)

Citation (examination)

- US 4189027 A 19800219 - DEAN LEE W III [US], et al
- US 6098926 A 20000808 - MORGENTHALER DAVID R [US]

Cited by

FR3028906A1; EP3706114A4; WO2018235974A1

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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