

Title (en)
Sound absorbing structure

Title (de)
Schallabsorbierende Struktur

Title (fr)
Structure isolante acoustique

Publication
EP 1557819 B1 20080109 (DE)

Application
EP 05400004 A 20050114

Priority
DE 102004003507 A 20040116

Abstract (en)
[origin: EP1557819A1] The structure to absorb sound is composed of hollow structure units within an outer shell with free loose particles or a free hollow body. The particles or bodies can be free or bonded together by an adhesive, solder or sintering within a matrix. The hollow structures have outer dimensions of 0.5-30 mm within a shell thickness of 10-3000 μm with a shell of metal or a metal alloy, or a ceramic. The particles can be of carbide, nitride, oxide, silicide, with a preferred oxide of Al_2O_3 , ZrO_2 , Y_2O_3 , MgO or Fe_2O_3 , Fe_3O_4 , CoO , NiO , MoO_3 and CuO .

IPC 8 full level
G10K 11/168 (2006.01); **G10K 11/16** (2006.01); **G10K 11/165** (2006.01)

CPC (source: EP)
G10K 11/16 (2013.01); **G10K 11/165** (2013.01)

Cited by
CN102712539A; CN110817863A; US9181136B2; US9855610B2; WO2011089130A3; WO2014033020A1; DE102020210162A1; WO2022034088A1; DE102021203028A1; WO2022200489A1; EP3570274A1; WO2019219474A1

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1557819 A1 20050727; **EP 1557819 B1 20080109**; AT E383639 T1 20080115; DE 102004003507 A1 20050811; DE 102004003507 B4 20060216; DE 502005002454 D1 20080221; ES 2299985 T3 20080601

DOCDB simple family (application)
EP 05400004 A 20050114; AT 05400004 T 20050114; DE 102004003507 A 20040116; DE 502005002454 T 20050114; ES 05400004 T 20050114