Title (en)

Acoustically absorbent ceiling tile having barrier facing with diffuse reflectance and use of said tile

Title (de)

Schalldämmende Deckenplatte mit Barrierefläche mit diffuser Reflexion und Verwendung der Deckenplatte

Title (fr)

Tuile de plafond absorbante acoustique comportant une façade de barrière avec réflectance diffuse et l'utilisation de la tuile de plafond

Publication

EP 2231948 B1 20120523 (EN)

Application

EP 08868571 A 20081222

Priority

- US 2008087904 W 20081222
- US 888107 P 20071220

Abstract (en)

[origin: WO2009086248A1] An acoustically absorbent ceiling tile includes a core of acoustically absorbing material having two major surfaces, and a facing for covering the core on at least one major surface. The facing comprises a porous flash spun plexifilamentary film-fibril sheet having a coherent surface and comprising a plurality of pores having a pore diameter between about 100 nm and about 20,000 nm and a mean pore diameter of less than about 20,000 nm. The facing has highly diffuse reflectance of light, and a reflectance of greater than about 86%. The use of the facing improves the acoustic absorption of ambient sound at frequencies below about 1200 Hz. The facing provides a barrier to moisture and particles including microorganisms so that the ceiling tile is suitable for use in environments in which cleanliness is critical.

IPC 8 full level

E04B 9/04 (2006.01); **D01D 5/11** (2006.01)

CPC (source: EP US)

E04B 9/04 (2013.01 - EP US); E04B 2103/04 (2013.01 - EP US)

Cited by

EP3824148A4

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2009086248 A1 20090709; CN 101946050 A 20110112; EP 2231948 A1 20100929; EP 2231948 B1 20120523; JP 2011508119 A 20110310; US 2009173570 A1 20090709

DOCDB simple family (application)

US 2008087904 W 20081222; CN 200880127276 A 20081222; EP 08868571 A 20081222; JP 2010539927 A 20081222; US 33995108 A 20081219