

Title (en)
Acoustic panel for noise barriers and noise barrier provided with such a panel

Title (de)
Akustisches Panel für Lärmschutzwände und Lärmschutzwand mit einem solchen Panel

Title (fr)
Panneau acoustique pour barrière antibruit et barrière antibruit équipée d'un tel panneau

Publication
EP 2458090 A2 20120530 (EN)

Application
EP 11190856 A 20111125

Priority
IT TV20100150 A 20101125

Abstract (en)
An acoustic panel (1) characterized by comprising: a reverberating plate (6) having, on one of the two faces, a stepped-profile surface (6a) which is dimensioned so as to reflect in a "diffused" manner at least one incident acoustic wave with a predetermined reference frequency; and a layer of sound-absorbent material (7) which is coupled to the reverberating plate (6) so as to cover the stepped-profile surface (6a), and so as to be crossed in "diffused" manner by the acoustic wave reflected by said stepped-profile surface (6a); the profile of the stepped-profile surface (6a) being determined on the basis of the "Quadratic Residue" mathematical model.

IPC 8 full level
E01F 8/00 (2006.01)

CPC (source: EP)
E01F 8/007 (2013.01); **E01F 8/0082** (2013.01)

Citation (applicant)

- M.R. SCHROEDER: "Diffuse Sound Reflection By Maximum-Length Sequence", JOURNAL OF ACOUSTIC SOCIETY OF AMERICA, vol. 57, 1975, pages 149 ~ 150, XP001418623
- Y. ANDO: "Concert Hall Acoustics", 1985, SPRINGER

Cited by
CN112962480A; ES2573202A1; AT522999A1; ITPD20130029A1; CN102737627A; US10669783B2; WO2019055241A1; US9702143B2; US10151105B2

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