

Title (en)
SOUND-ABSORBING PANEL FOR SOUNDPROOF CABIN

Title (de)
SCHALLABSORBIERENDE PLATTE FÜR SCHALLDICHT KABINE

Title (fr)
PANNEAU INSONORISANT POUR CABINE INSONORISÉE

Publication
EP 4223953 B1 20240605 (EN)

Application
EP 23154174 A 20230131

Priority
IT 202200002012 A 20220204

Abstract (en)
[origin: EP4223953A1] A sound-absorbing panel (1) is described comprising a first layer (4) of sound-absorbing material, a second layer (5) of sound-absorbing material, and an integrated frame (6) supporting the first layer (4) of sound-absorbing material and the second layer (5) of sound-absorbing material; the first layer (4) of sound-absorbing material has a first front surface (7) apt to be directly exposed to an acoustic source for being struck by sound waves (3) without the interposition of grated elements or other parts, a first rear surface (8) opposite the first front surface (7), and a first lateral surface (10) delimited between the first front surface (7) and the first rear surface (8); the second layer (5) of sound-absorbing material has a second front surface (11) facing towards said first rear surface (8) and separated from the external environment by means of the first layer (4) of sound-absorbing material, a second rear surface (12) opposite the second front surface (11), and a second lateral surface (13) delimited between the second front surface (11) and the second rear surface (12); the frame (6) comprises: a support profile (14) laterally surrounding at least part of the first layer (4) of sound-absorbing material and of the second layer (5) of sound-absorbing material and having an abutment wall (15) for said first lateral surface (10) and second lateral surface (13) and a flange (16) projecting from the abutment wall (15); a protective sheet (17) resting against the flange (16) of the support profile (14) and defining, in turn, an abutment element for said second rear surface (12), so that the second layer (5) of sound-absorbing material is interposed between the first layer (4) of sound-absorbing material and the protective sheet (17) itself; and at least one containment bracket (18) having a fixing portion (18a) fixed to the support profile (14) and a containment portion (18b) cooperating with the first layer (4) of sound-absorbing material at said first front surface (7); the sound-absorbing material of the first layer (4) is made of natural or artificial resin-bonded fibres; the first layer (4) of sound-absorbing material and the second layer (5) of sound-absorbing material are releasably interposed and fitted between said containment portion (18b) and the protective sheet (17); the panel (1) further comprises a layer of anti-vibration material (19) interposed between the frame (6) and said first layer (4) of sound-absorbing material and second layer (5) of sound-absorbing material.

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