

Title (en)

Sound-insulating structure with body containing absorbant porous material

Title (de)

Schall-isolierendes Bauelement mit einem Körper aus absorbierendem porösem Material

Title (fr)

Structure antibruit avec corps en matériau poreux absorbant

Publication

EP 0926656 A1 19990630 (FR)

Application

EP 98403264 A 19981222

Priority

FR 9716409 A 19971223

Abstract (en)

The structure (11) consists of a body (12) of a porous material which absorbs acoustic energy, e.g. a slab or partition of wood concrete. It incorporates at least one tubular component (13) which forms a cavity. The tubular component is embedded in the material and has a series of equally spaced bores of 0.5 - 20 mm diameter, the dimensions of the bores and cavity being selected to give optimum absorption of noise at a predetermined acoustic frequency. The cavity of the tubular component, which is 30 - 50 mm in diameter, can be empty or filled with an absorbent material. The structure can have a series of parallel tubular components of different sizes to absorb noises at different frequencies, and the structure can incorporate a system for vibrating the air column inside the tubular components in an opposite phase to the acoustic wave to be damped.

Abstract (fr)

L'invention concerne une structure (11) antibruit comprenant un corps (12) en matériau poreux absorbant l'énergie acoustique. La structure comporte au moins un élément tubulaire (13) définissant une cavité, ledit élément étant noyé dans la masse du matériau absorbant et percé d'au moins un trou (15) sur une paroi pour former un col de résonateur, les dimensions de ladite cavité et du trou étant agencées pour permettre l'absorption optimisée d'une fréquence acoustique déterminée. <IMAGE>

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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