

Title (en)  
Absorbing material for acoustic waves

Title (de)  
Absorbierendes Material für Schallwellen

Title (fr)  
Matériau absorbant les ondes acoustiques

Publication  
**EP 0720143 A1 19960703 (FR)**

Application  
**EP 95402932 A 19951222**

Priority  
FR 9415646 A 19941226

Abstract (en)  
Absorbing compsn. for sound waves comprising: (a) a structural material (I) imparting limited rigidity to the compsn.; and (b) an absorbing material (II) having a lesser rigidity than the compsn. in order to dissipate the sound wave energy; is characterised in that (I) is a thixotropic material constituted by macromolecules (III) carrying electric charges of a same sign and having no mutual covalent bonds, the electric charges being neutralised by small and mobile counter ions. Pref. (I) is a plastic porous material impregnated with the thixotropic material. At least part of the counter ions carry hydroxyl groups allowing hydrogen bonding. (III) is (i) an acid polymer, such as polyacrylic acid, polystyrenesulphonic acid and carboxycellulose, the counter ions being derived from organic bases, such as ammonia, aminoalcohols (mono-, di- or tri-ethanol amine) and quat. ammoniums; or (ii) a basic polymer, such as polyethylene-imine, the counter ions being derived from carboxylic acids, such as citric acid, propionic acid, glycolic acid and sebacic acid, sulphonic acids or phosphonic acids.

Abstract (fr)  
Composition absorbante pour ondes sonores, comportant: un matériau de structure conférant une rigidité limitée à ladite composition, et un matériau absorbant présentant par lui-même une rigidité plus faible que ladite composition pour dissiper l'énergie d'ondes sonores se propageant dans cette composition, ladite composition étant caractérisée par le fait que ledit matériau absorbant est un matériau thixotropique constitué de macromolécules porteuses de charges électriques d'un même signe et dépourvues de liaisons covalentes mutuelles, ces charges électriques étant neutralisées par des contre-ions mobiles et de petite taille. De préférence ledit matériau de structure est un matériau poreux déformable imprégné par ledit matériau thixotrique. <IMAGE>

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• [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 572 (M - 1696) 2 November 1994 (1994-11-02)  
• [A] DATABASE WPI Section Ch Week 8702, Derwent World Patents Index; Class A88, AN 87-010871

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