

Title (en)
ACOUSTIC/SHOCK WAVE ATTENUATING ASSEMBLY

Title (de)
SCHALL- UND STOSSWELLENSCHLUCKENDE VORRICHTUNG

Title (fr)
SYSTEME D'AFFAIBLISSEMENT D'ONDES DE CHOC ET D'ONDES ACOUSTIQUES

Publication
EP 0706596 B1 20020529 (EN)

Application
EP 93918145 A 19930702

Priority
US 9306319 W 19930702

Abstract (en)
[origin: CA2166399A1] An acoustic/shock wave attenuating assembly (10) comprised of porous screens (12) forms an enclosure filled with a suitable pressure wave attenuating medium (14) or material having fluid characteristics. This basic configuration can be suspended or held in place by a rigid structure (16). When the pressure attenuating medium (14) is a liquid, the attenuating assembly (10) is provided with a lining (30) for containment. Multiple attenuating assemblies (10) can be employed, with adjacent attenuating assemblies separated by a small gap (40). The pressure attenuating medium (14) may be a liquid, gas emulsion, an aqueous foam, or a gel (with or without entrained gas). Alternatively, solid particulates (62) having bulk mechanical properties of a fluid may be employed as the pressure wave attenuating medium and may have an adhesive or the like resisting relative movement between particulates (62) to simulate viscous effects. Elements of the assembly may incorporate materials which absorb thermal energy through endothermic chemical reactions, such as intumescent materials, to enhance the pressure attenuating effect.

IPC 1-7
E04B 1/82; F42B 33/00

IPC 8 full level
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Cited by
CN113053345A; CN111089519A; CN116497959A; CN114344118A; US8590437B2; WO2009099621A1; WO2022188901A1; EP1660839A2

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