

Title (en)  
A STRUCTURAL COMPOSITE MATERIAL FOR ACOUSTIC DAMPING

Title (de)  
STRUKTURELLES VERBUNDMATERIAL FÜR SCHALLDÄMPFUNG

Title (fr)  
MATERIAU COMPOSITE STRUCTUREL POUR ISOLATION ACOUSTIQUE

Publication  
**EP 1620255 A1 20060201 (EN)**

Application  
**EP 04731403 A 20040506**

Priority  
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Abstract (en)  
[origin: GB2401346A] A composite material (10) for acoustical or mechanical damping comprises a plurality of layers of fibrous material (12) embedded in a solid material (14). The solid material layers are interspersed by layers of high hysteretic loss material such as viscoelastic polymer film (24) which may be continuous or perforated. The solid material may comprise epoxy, polyester, phenolic, vinyl ester or polyurethane resin. The viscoelastic film may comprise polyurethane, polyester or polyethylene. Applications include automotive dashboards and other body parts, rudders, turbine blades, vehicle transmission shafts, magneto-resonance imaging housing, aircraft parts, housing for other equipment, damping oscillations in automatic systems, changing the load response and geometry response of structures, powder delivery systems and reduction of noise in transport.

IPC 1-7  
**B32B 3/24**; **B32B 5/28**

IPC 8 full level  
**B32B 3/10** (2006.01); **B32B 5/26** (2006.01); **B32B 5/28** (2006.01); **F16F 1/366** (2006.01); **F16F 1/377** (2006.01); **F16F 9/30** (2006.01); **G10K 11/168** (2006.01)

CPC (source: EP US)  
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