

Title (en)

COMPOSITE MATERIAL SPRING MODULES FOR CUSHIONS

Title (de)

FEDERUNGSMODUL AUS COMPOSITMATERIAL FÜR KISSEN

Title (fr)

MODULES A RESSORTS EN MATERIAU COMPOSITE POUR MATELAS

Publication

EP 1327087 A4 20030827 (EN)

Application

EP 01952969 A 20010703

Priority

- US 0141244 W 20010703
- US 61442900 A 20000712

Abstract (en)

[origin: WO0204838A1] Composite material spring modules (16) have a fiber reinforced composite material spring body with attachment fittings (34, 36) integrally formed about the spring body. The attachment fittings are molded of a flexible material which dynamically responds to changes in the shape of the spring body upon deflection. Integral formation of the fittings with the spring body provides a unified single piece module which is readily attachable to any structure where spring support is desired. In one embodiment, a mounting foot (37) is configured for mounting of the spring module directly to a planar surface of a supporting frame member by a fastener, or alternatively configured to engage with a frame member without use of a fastener. The composite material spring modules exhibit the properties of stiffness and return to uncompressed state from total depth deflection without set.

IPC 1-7

F16F 3/093; **A47C 23/02**; **A47C 23/00**

IPC 8 full level

A47C 23/00 (2006.01); **F16F 1/02** (2006.01)

CPC (source: EP)

A47C 23/02 (2013.01); **F16F 1/02** (2013.01); **F16F 2230/0047** (2013.01)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 0204838A1

Cited by

US11051631B2; US11076705B2; US12048380B2; US11033114B2

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