

Title (en)

COMPOSITE MATERIAL SPRING MODULES WITH INTEGRALLY FORMED ATTACHMENT FITTINGS

Title (de)

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Title (fr)

MODULES RESSORT EN MATERIAU COMPOSITE AVEC FIXATIONS MONOBLOC

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Application

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Abstract (en)

[origin: WO9846902A1] Composite material spring modules (16) and methods of manufacture are described having a fiber reinforced composite material spring body (32) with attachment fittings (34, 36) integrally formed about the spring body (32). The attachment fittings (34, 36) are molded of a flexible material which dynamically responds to changes in the shape of the spring body (32) upon deflection. Integral formation of the fittings (34, 36) with the spring body (32) provides a unified single piece module which is readily attachable to any structure where spring support is desired. The composite material spring modules (16) are described as a mattress foundation (10), by attachment to high and low profile frames (12) and to an overlying grid (14). Methods of manufacture of the composite material spring modules (16) with integrally formed attachment fittings (34, 36) are described. Methods of assembly of flexible weight bearing structures such as mattress foundations (10) using the composite material spring modules (16) are also described.

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