

Hybrid Composite Structure For Stiffening And Damping And The Method of Fabrication The Same

Abstract Of The Disclosure

A hybrid composite structure to provide higher stiffness and increased damping is disclosed.

5 The structure comprises

(a) a primary member as an interface , having a hollow cavity and a cross section designed to surround a second interface within the hollow cavity;

(b) a secondary member as the second interface , optimised to provide stiffness for the primary member in bending or torsion being made from high modulus material and being positioned
10 within the hollow cavity of the primary member, wherein the secondary member is formed from 4 carbon fiber plates or quadrants ; and

(c) a holding member to secure the secondary member to the primary member in such a way that a relative motion between the primary member and the secondary member is available to dissipate energy formed from (where the energy comes from?).

15 (FIG. 1)