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(54) Title: SUSPENSION STRUCTURES

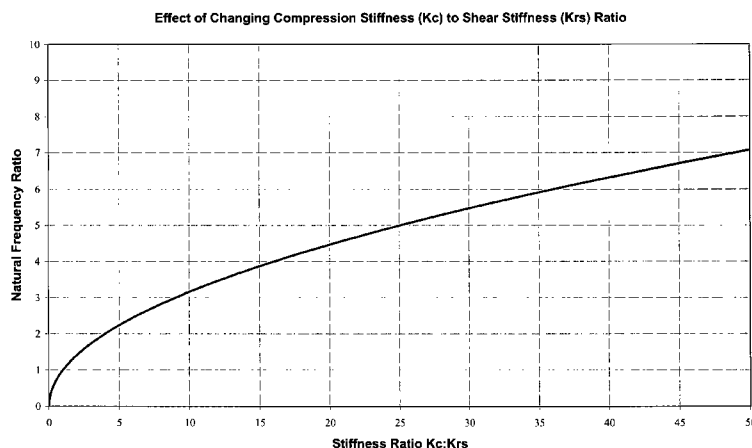


Figure 1

(57) **Abstract:** A support structure is used to mount the stator of a rotating electrical machine (e.g. a motor or generator). The support structure includes a rigid external support frame (6). To minimise the transmission of vibrations caused by stator electromagnetic forces into the external support frame (6), at least one sandwich anti-vibration mount (14a) is secured between the external support frame (6) and a part of the stator (28). The mount (14a) is oriented relative to the stator such that it experiences compression loading in a substantially tangential direction of the stator and radial shear loading in a substantially radial direction of the stator during operation of the rotating electrical machine. The sandwich anti-vibration mount (14a, 14b) is pre-loaded with a pre-determined compression load substantially along its compression axis (Ac). The mount (14a) has a high stiffness characteristic Kc for compression loading and a stiffness characteristic Krs for radial shear loading that is substantially zero, or even negative. The mount (14a) will therefore restrain tangential deflection of the stator while still achieving a low-stiffness suspension in the radial direction.