

Title (en)

A TORSIONAL ISOLATION DEVICE FOR ISOLATING TORQUE FLUCTUATIONS

Title (de)

TORSIONSDÄMPFUNGSVORRICHTUNG ZUR DÄMPFUNG VON DREHMOMENTSCHWANKUNGEN

Title (fr)

DISPOSITIF D ISOLATION EN TORSION SERVANT A ISOLER LES VARIATIONS DE COUPLE

Publication

EP 1971794 A1 20080924 (EN)

Application

EP 06820472 A 20061211

Priority

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- GB 0600095 A 20060105

Abstract (en)

[origin: WO2007077415A1] A torsional isolation device such as a pulley isolates torque fluctuations of a rotary drive shaft such as a crankshaft of an internal combustion engine. The device has an inner hub member (22) for connection to the drive shaft and an outer pulley rim (30) for connection to a driven member via a drive belt. The members (22, 24) have an axial spacing so as to define an annular cavity between radially extending walls of the inner and pulley members and radial projections (42, 44) that extend into the annular cavity so as to provide first and second chambers. Elastomeric elements (50, 52) are disposed in each chamber and arranged so as to have a radial and/or axial clearance volume such that when compressed between the radial projections during angular displacement of the pulley and hub members they are allowed to deform outwardly into said clearance volume. This occurs in both directions so that the device can be used with a starter/alternator. A predetermined amount of relative angular displacement of the hub and pulley members is accommodated in each direction by the deformation of the respective element in said chamber during its compression until said clearance volume is occupied whereupon the torque is transmitted from one member to the other. The clearance volumes may be different to provide different torque transfer characteristic in the different directions of relative displacement.

IPC 8 full level

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CPC (source: EP GB)

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