

Title (en)

CONCENTRIC CAMSHAFT AXIAL POSITION CONTROL

Title (de)

KONZENTRISCHE NOCKENWELLENAXIALLAGEREGELUNG

Title (fr)

COMMANDE DE POSITION AXIALE D'UN ARBRE À CAMES CONCENTRIQUE

Publication

EP 3633157 A1 20200408 (EN)

Application

EP 18198581 A 20181004

Priority

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Abstract (en)

A concentric camshaft for an internal combustion engine is disclosed that comprises an outer tube (12), an inner shaft (24), and two groups of cam lobes (14;22). The first group (14) is fixed for rotation with the outer tube (12) and the second group (22) is rotatably mounted on the outer tube (12) and connected for rotation with the inner shaft (24). One or more bearing rings (16,17) are mounted to the outer tube (12) providing a bearing surface for supporting the camshaft in the engine, a bearing ring (16) secured to an axial end of the outer tube (12) serving to apply drive torque to the outer tube (12). In the invention, a sleeve (30) is secured to the outer surface of the inner shaft (24) for setting the axial position of the inner shaft (24) relative to the outer tube (12), the axial length of the sleeve (30) serving to limit the axial movement of the inner shaft (24) relative to the outer tube (12); a first axial end face of the sleeve (30) serving to limit the movement of the inner shaft (24) in one axial direction, and a second axial end face of the sleeve (30) serving to limit movement of the inner shaft (24) in the opposite axial direction.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

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Citation (search report)

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