

Title (en)
CENTRIFUGAL OIL MIST SEPARATION DEVICE INTEGRATED IN AN AXIAL HOLLOW SHAFT OF AN INTERNAL COMBUSTION ENGINE

Title (de)
IN EINE AXIAL HOHLE WELLE EINES VERBRENNUNGSMOTORS INTEGRIERTE ZENTRIFUGAL-ÖLNEBELABSCHIEDEREINRICHTUNG

Title (fr)
DISPOSITIF CENTRIFUGE SEPARATEUR DE BROUILLARD D'HUILE INTEGRE DANS UN ARBRE AXIALEMENT CREUX D'UN MOTEUR A COMBUSTION INTERNE

Publication
EP 1880085 B2 20131009 (DE)

Application
EP 06722839 A 20060506

Priority
• DE 2006000781 W 20060506
• DE 102005022254 A 20050510
• DE 102005042725 A 20050908

Abstract (en)
[origin: WO2006119737A1] The aim of the invention is the achievement of a high separation efficiency for a centrifugal oil mist separator device integrated in a axial hollow camshaft of an internal combustion engine. Said aim is achieved, whereby a device is provided whereby the camshaft (101) has, at a first end, radial oil mist introduction openings (106) for oil mist to be introduced into the axial cavity (102) in the camshaft (101) and, at the second end for removal, a radial oil removal channel (112) for oil separated in the liquid phase and an axial gas removal channel (113) for the oil mist flow remaining after removal of the liquid fraction, a centrifugal oil mist pre-separator is mounted before the oil mist introduction holes (106) as a pre-separator (107) connected to the camshaft (101) and, within the axial cavity (102) of the camshaft (101), a cyclone inducer (108) is provided as final separator.

[origin: WO2006119737A1] The device has a radial oil mist feeding opening (106) for oil mist to be introduced into an axial cavity (102) in a camshaft (101), and a radial oil leakage channel (112) for oil separated as a liquid phase. A centrifugal oil mist pre-separator is pre-mounted as a pre-separator that is connected with the camshaft in the oil mist feeding opening. A twist producer (108) is provided as a final separator within the axial cavity.

IPC 8 full level
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CPC (source: EP US)
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Cited by
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