

Title (en)

Engine with hydraulic camshaft phasing device

Title (de)

Brennkraftmaschine mit einer hydraulischen Vorrichtung zur Drehwinkelverstellung einer Nockenwelle gegenüber einer Kurbelwelle

Title (fr)

Moteur muni d'un déphaseur d'arbre à cames hydraulique

Publication

**EP 1607590 A3 20081015 (DE)**

Application

**EP 05010196 A 20050511**

Priority

DE 102004028868 A 20040615

Abstract (en)

[origin: EP1607590A2] The device includes a hydraulic fluid system with at least one hydraulic valve and connected to two pressure chambers (12,13) pressurized or depressurized with hydraulic fluid through hydraulic lines. The two pressure chambers are separated within the work spaces (9) of a drive wheel (3) by the blades (11) of a rotor (5). The rotor is rotatable relative to a stator (4), and attached to the camshaft. The drive wheel couples the stator to the crankshaft.

IPC 8 full level

**F01L 1/344** (2006.01)

CPC (source: EP US)

**F01L 1/3442** (2013.01 - EP US); **F01L 2001/34446** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

**EP 1607590 A2 20051221; EP 1607590 A3 20081015; EP 1607590 B1 20130213**; DE 102004028868 A1 20060105;  
US 2005274344 A1 20051215; US 7222597 B2 20070529

DOCDB simple family (application)

**EP 05010196 A 20050511**; DE 102004028868 A 20040615; US 15270305 A 20050614