

Title (en)

DEVICE FOR ALTERING THE CONTROL TIMES OF GAS EXCHANGE VALVES IN AN INTERNAL COMBUSTION ENGINE, IN PARTICULAR A ROTATING PISTON ADJUSTMENT DEVICE FOR THE ROTATION ANGLE ADJUSTMENT OF A CAMSHAFT RELATIVE TO A CRANKSHAFT

Title (de)

VORRICHTUNG ZUM VERÄNDERN DER STEUERZEITEN VON GASWECHSELVALVEN EINER BRENNKRAFTMASCHINE,
INSBESONDERE ROTATIONSKOLBEN-VERSTELLEINRICHTUNG ZUR DREHWINKELVERSTELLUNG EINER NOCKENWELLE GEGENÜBER
EINER KURBELWELLE

Title (fr)

DISPOSITIF DE MODIFICATION DES TEMPS DE COMMANDE DE SOUPAPES D'ECHANGE GAZEUX D'UN MOTEUR A COMBUSTION
INTERNE, NOTAMMENT D'UN DISPOSITIF DE REGLAGE D'UN PISTON ROTATIF PERMETTANT LE REGLAGE ANGULAIRE DE ROTATION
D'UN ARBRE A CAMES PAR RAPPORT A UN VILEBREQUIN

Publication

EP 1646769 B1 20100818 (DE)

Application

EP 04734221 A 20040521

Priority

- EP 2004005447 W 20040521
- DE 10332881 A 20030719

Abstract (en)

[origin: DE10332881A1] The valve timing adjustment device (1) is secured to the end of the camshaft within the cylinder head of the IC engine and uses a rotary piston hydraulic setting mechanism for adjusting the angular position of the camshaft relative to the crankshaft in dependence on engine operating parameters. The setting mechanism has a drive wheel (2) coupled to the crankshaft and a rotor wheel (3) rotating with the camshaft, the drive wheel having an internal hollow space divided into hydraulic pressure chambers (10,11) by at least one rotor blade (9) of the rotor wheel, the latter locked in engagement with the drive wheel in a base position by a locking pin (12), acted on by a coil spring (14) fitting in a hollow cylinder (19) secured in the hub of the rotor wheel.

IPC 8 full level

F01L 1/34 (2006.01); **F01L 1/344** (2006.01)

CPC (source: EP)

F01L 1/3442 (2013.01)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 10332881 A1 20050210; DE 502004011559 D1 20100930; EP 1646769 A1 20060419; EP 1646769 B1 20100818;
WO 2005019611 A1 20050303

DOCDB simple family (application)

DE 10332881 A 20030719; DE 502004011559 T 20040521; EP 04734221 A 20040521; EP 2004005447 W 20040521