

Title (en)

DEVICE FOR VARIABLE ADJUSTMENT OF THE CONTROL TIMES OF GAS EXCHANGE VALVES OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VORRICHTUNG ZUR VARIABLEN EINSTELLUNG DER STEUERZEITEN VON GASWECHSELVENTILEN EINER BRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF DE RÉGLAGE VARIABLE DES TEMPS DE COMMANDE DES VANNES D'ÉCHANGE DE GAZ D'UN MOTEUR À COMBUSTION INTERNE

Publication

EP 2536925 B1 20141210 (DE)

Application

EP 11701237 A 20110120

Priority

- DE 102010008002 A 20100215
- EP 2011050745 W 20110120

Abstract (en)

[origin: WO2011098330A1] The invention relates to a device (11) for variable adjustment of the control times of gas change valves (9, 10) of an internal combustion engine (1) having a hydraulic phase adjustment apparatus (12), a camshaft (6, 7), a volume accumulator (18), a first fastening element (14) designed separately to the camshaft (6, 7) and a central screw (13), wherein the central screw (13) reaches through the phase adjustment apparatus (12) and wherein one end of the central screw (13) contacts an axial side surface of the phase adjustment apparatus (12) and a first thread (15) is designed on the other end.

IPC 8 full level

F01L 1/344 (2006.01)

CPC (source: EP US)

F01L 1/344 (2013.01 - EP US); **F01L 1/3442** (2013.01 - EP US); **F01L 2001/34446** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2011098330 A1 20110818; BR 112012020001 A2 20190924; CN 102762822 A 20121031; CN 102762822 B 20140611; DE 102010008002 A1 20110818; EP 2536925 A1 20121226; EP 2536925 B1 20141210; US 2012304947 A1 20121206; US 8662041 B2 20140304

DOCDB simple family (application)

EP 2011050745 W 20110120; BR 112012020001 A 20110120; CN 201180009636 A 20110120; DE 102010008002 A 20100215; EP 11701237 A 20110120; US 201113578919 A 20110120