

Title (en)

APPARATUS FOR THE VARIABLE SETTING 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 D'AJUSTEMENT VARIABLE DES INSTANTS D'ACTIVATION DES SOUPAPES D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1989404 A1 20081112 (DE)

Application

EP 07712058 A 20070119

Priority

- EP 2007050521 W 20070119
- DE 102006007671 A 20060218

Abstract (en)

[origin: WO2007093480A1] The invention relates to an apparatus (10) for the variable setting of control times of gas exchange valves (9a, 9b) of an internal combustion engine (1), having an inner rotor (23) and an outer rotor (22) which is arranged such that it can rotate relative to the former, wherein the inner rotor (22) has a constant phase relationship to a crankshaft (2) of the internal combustion engine (1), wherein the apparatus (10) has one or more coupling elements (44), into which a drive shaft (12) of an additional assembly (11) can engage, and wherein torque can be transmitted from the apparatus (10) to the drive shaft (12) by means of the coupling element (44) or coupling elements (44). It is proposed here to connect the coupling element (44) or coupling elements (44) fixedly in terms of rotation to the inner rotor (23) or to configure it/them in one piece with the latter.

IPC 8 full level

F01L 1/344 (2006.01)

CPC (source: EP KR US)

F01L 1/34 (2013.01 - KR); **F01L 1/344** (2013.01 - KR); **F01L 1/3442** (2013.01 - EP US)

Citation (search report)

See references of WO 2007093480A1

Citation (examination)

DE 10260546 A1 20040701 - INA SCHAEFFLER KG [DE]

Designated contracting state (EPC)

DE FR GB HU IT RO

DOCDB simple family (publication)

WO 2007093480 A1 20070823; **WO 2007093480 A8 20081127**; DE 102006007671 A1 20070906; EP 1989404 A1 20081112; JP 2009526941 A 20090723; KR 101291503 B1 20130801; KR 20080103053 A 20081126; US 2009013948 A1 20090115; US 7886704 B2 20110215

DOCDB simple family (application)

EP 2007050521 W 20070119; DE 102006007671 A 20060218; EP 07712058 A 20070119; JP 2008554718 A 20070119; KR 20087019959 A 20070119; US 27957407 A 20070119