

Title (en)
Leakage sealed camshaft adjuster with return spring

Title (de)
Leckagedichter Nockenwellenversteller mit Rückstellfeder

Title (fr)
Dispositif de réglage d'arbre à came anti-fuite doté d'un ressort de rappel

Publication
EP 1865158 A2 20071212 (DE)

Application
EP 07106499 A 20070419

Priority
DE 102006022219 A 20060511

Abstract (en)
The adjuster has a rotor (5) including a core and blade (7). The rotor includes an elevation profile sliding along its diameter with minimum radius. The largest profile is provided in extremities (73) of the blade such that a spring chamber (53) extends along a rotor surface, where the chamber completely lies in an area of the core. The width of the chamber is larger than the height of the chamber. The chamber is surrounded by a rotor core edge (29) in a radial direction of the blade, where the chamber has a space rinsed with hydraulic medium such as oil.

Abstract (de)
Die vorliegende Erfindung bezieht sich auf einen Nockenwellenversteller (1) des Riemenradtyps für Verbrennungsmotoren. Der Nockenwellenversteller ist federvorgespannt, mit einer Feder in einem sich im Rotor befindenden Federraum. Der Nockenwellenversteller ist hydraulisch dicht.

IPC 8 full level
F01L 1/34 (2006.01); **F01L 1/344** (2006.01)

CPC (source: EP KR)
F01L 1/047 (2013.01 - KR); **F01L 1/34** (2013.01 - EP KR); **F01L 1/344** (2013.01 - EP KR); **F01L 1/3442** (2013.01 - EP);
F01L 2001/34483 (2013.01 - EP); **F01L 2820/01** (2013.01 - EP)

Cited by
DE102008023066B4; DE102008023066A1; DE102019114214A1; CN102762820A; EP2184450A1; EP2199548A1; US8931447B2;
DE102008032412A1; US8752517B2; US8578899B2; WO2016045669A1; WO2011160994A1; WO2014048588A1; WO2011098331A1;
WO2011003681A1; DE102011100011A1; US9441508B2

Designated contracting state (EPC)
DE ES FR GB

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1865158 A2 20071212; EP 1865158 A3 20071219; EP 1865158 B1 20081217; CN 101196131 A 20080611; CN 101196131 B 20110824;
DE 102006022219 A1 20071122; DE 102006022219 B4 20080103; DE 502007000296 D1 20090129; ES 2317619 T3 20090416;
KR 101404661 B1 20140609; KR 20070109948 A 20071115

DOCDB simple family (application)
EP 07106499 A 20070419; CN 200710138865 A 20070511; DE 102006022219 A 20060511; DE 502007000296 T 20070419;
ES 07106499 T 20070419; KR 20070046058 A 20070511