

Title (en)
CAMSHAFT ADJUSTER FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
NOCKENWELLENSTELLER FÜR VERBRENNUNGSMOTOR

Title (fr)
DISPOSITIF DE REGLAGE D'ARBRE A CAMES POUR MOTEUR A COMBUSTION INTERNE

Publication
EP 1979582 A1 20081015 (EN)

Application
EP 06830406 A 20061206

Priority
• EP 2006069360 W 20061206
• DE 102006002993 A 20060121

Abstract (en)
[origin: WO2007082600A1] The invention relates to a camshaft adjuster for an internal combustion engine. In camshaft adjusters, spring elements which influence the moment conditions for the positional definition and influencing of the camshaft adjuster are usually arranged so as to lie on the inside of the housing. According to the invention, a spring element (29) is arranged outside the housing (4) in a camshaft adjuster (1), a spring base point of the spring element (29) being supported via a pin (21) which penetrates the housing (4) and is connected fixedly in terms of rotation to a rotor (6).

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

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

Citation (search report)
See references of WO 2007082600A1

Cited by
DE102013217145A1; DE102013218031A1; DE102013219139A1; WO2014173396A1; DE102012213401B4; DE102012213402B4;
DE102013219139B4; DE102013200767B4; DE102013218031B4; WO2020182250A1; DE102013200767A1; WO2015035993A1;
DE102012213401A1; DE102012213402A1; WO2014019724A1; US9429050B2; DE102012217393A1; WO2014048588A1; US9441508B2;
DE102013207383A1; US9689284B2; US9970334B2; DE102013207383B4

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 LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007082600 A1 20070726; AT E479827 T1 20100915; CN 101360890 A 20090204; CN 101360890 B 20111123;
DE 102006002993 A1 20070809; DE 602006016649 D1 20101014; EP 1979582 A1 20081015; EP 1979582 B1 20100901;
JP 2009523943 A 20090625; KR 101304714 B1 20130906; KR 20080087122 A 20080930; PL 1979582 T3 20110429;
US 2010154732 A1 20100624

DOCDB simple family (application)
EP 2006069360 W 20061206; AT 06830406 T 20061206; CN 200680051472 A 20061206; DE 102006002993 A 20060121;
DE 602006016649 T 20061206; EP 06830406 A 20061206; JP 2008550655 A 20061206; KR 20087017558 A 20061206;
PL 06830406 T 20061206; US 16111806 A 20061206