

Title (en)

VALVE TIMING CONTROL DEVICE WITH MID LOCK DIRECTIONAL SUPPLY AND CAM TORSIONAL RECIRCULATION

Title (de)

VENTILZEITSTEUER-STEUERVORRICHTUNG MIT LENKZUFUHR FÜR EINE MITTENPOSITIONSVERRIEGELUNG UND NOCKENTORSIONS-RÜCKFÜHRUNG

Title (fr)

DISPOSITIF DE COMMANDE POUR CALAGE DE DISTRIBUTION A GUIDAGE DE DIRECTION POUR UN VERROUILLAGE EN POSITION MEDIANE ET RETOUR DE TORSION DE CAME

Publication

EP 2966272 A3 20160217 (DE)

Application

EP 15175428 A 20150706

Priority

- US 201462022963 P 20140710
- US 201514743599 A 20150618

Abstract (en)

[origin: US2016010515A1] A valve timing control device, in effect a cam phaser, for an internal combustion engine. The valve timing control device includes a rotor connected to a camshaft and having a plurality of vanes. A stator is engaged with the rotor, and includes a plurality of webs. Pressure chambers are provided between each of the webs and vanes. The cam phaser is configured to automatically locate to its mid-lock position, without having to rely on electronic control. At least one embodiment of the present invention is configured to use cam torque to recirculate oil from one side of the vanes of the rotor to the other.

IPC 8 full level

F01L 1/344 (2006.01)

CPC (source: EP US)

F01L 1/3442 (2013.01 - EP US); **F01L 2001/34426** (2013.01 - EP US); **F01L 2001/34456** (2013.01 - EP US); **F01L 2001/34463** (2013.01 - EP US); **F01L 2001/34469** (2013.01 - EP US)

Citation (search report)

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- [A] WO 2012094324 A1 20120712 - HILITE GERMANY GMBH [DE], et al
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