

Title (en)
AUTOMOTIVE ENGINE PHASE-ADJUSTING DEVICE

Title (de)
PHASENEINSTELLUNGSVORRICHTUNG FÜR EINEN AUTOMOBILMOTOR

Title (fr)
DISPOSITIF DE RÉGLAGE DE PHASE DE MOTEUR DE VÉHICULE

Publication
EP 2910744 A1 20150826 (EN)

Application
EP 12886214 A 20121009

Priority
JP 2012076099 W 20121009

Abstract (en)
To provide a variable phaser for an automobile engine including a self-locking mechanism which does not hinder an operation of changing a relative phase angle of a cam shaft with respect to a drive rotating member. In a variable phaser for an automobile engine including a drive rotating member having a cylindrical section and driven by a crank shaft, a cam shaft coaxially supporting the drive rotating member in a coaxial and relatively rotating fashion, a relative phase angle changing mechanism, and a self-locking mechanism preventing the misalignment of the relative phase angle due to the cam torque by means of pressing the lock plate held on a holding section integral with the cam shaft to an inner circumferential surface of the cylindrical section, plate-pressing surfaces disposed at a plurality of positions almost equally separated along an outer circumferential direction of an outer circumference of the holding section, and a plurality of lock plates equally separated in correspondence to the plate-pressing surfaces are formed, and the respective plate-pressing surfaces are formed by first and second pressing surfaces for delivering the cam torques along advance and lag directions to the respective lock plates.

IPC 8 full level
F01L 1/34 (2006.01); **F01L 1/356** (2006.01)

CPC (source: EP US)
F01L 1/34409 (2013.01 - EP US); **F01L 1/46** (2013.01 - EP US); **F01L 2001/3522** (2013.01 - EP US); **F01L 2013/101** (2013.01 - EP US)

Citation (search report)
See references of WO 2014057530A1

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