

Title (en)

Cam shaft phase adjuster with improved locking device

Title (de)

Nockenwellen-Phasensteller mit Verriegelungseinrichtung

Title (fr)

Régulateur de phase d'arbres doté d'un dispositif de verrouillage amélioré

Publication

EP 2492459 A3 20130123 (DE)

Application

EP 12156574 A 20120222

Priority

DE 102011004539 A 20110222

Abstract (en)

[origin: EP2492459A2] The adjuster has a front pin section exhibiting inclination at an outer circumference in a locking and unlocking direction. An upper receiving portion exhibits an inclination at an inner circumference in the direction, where the latter inclination is so large over an entire length of the upper receiving portion such that a rotor (7) is non-blocked in the upper receiving portion by engagement of the front pin section in the upper receiving portion and the engagement of the front pin section in a lower receiving portion causes blockage of the rotor.

IPC 8 full level

F01L 1/344 (2006.01)

CPC (source: EP)

F01L 1/3442 (2013.01); **F01L 2001/0476** (2013.01); **F01L 2001/34433** (2013.01); **F01L 2001/34446** (2013.01); **F01L 2001/34453** (2013.01); **F01L 2001/34456** (2013.01); **F01L 2001/34469** (2013.01)

Citation (search report)

- [X] EP 1008729 A2 20000614 - MITSUBISHI ELECTRIC CORP [JP]
- [X] WO 2005049976 A1 20050602 - INA SCHAEFFLER KG [DE], et al
- [X] DE 19825288 A1 19981210 - AISIN SEIKI [JP]
- [X] DE 10150856 A1 20030424 - INA SCHAEFFLER KG [DE]

Cited by

EP4332356A1; FR3001255A1; CN105556073A; US10156165B2; US10294832B2; WO2015039657A1; WO2015039653A1; WO2015140267A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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