

Title (en)
PHASE CHANGE MECHANISM

Title (de)
PHASENVERSCHIEBUNGSVORRICHTUNG

Title (fr)
MECANISME DE CHANGEMENT DE PHASE

Publication
EP 0656094 B1 19960403 (EN)

Application
EP 93917884 A 19930722

Priority
• GB 9301540 W 19930722
• GB 9215560 A 19920722

Abstract (en)
[origin: GB2268998A] A phase change mechanism, for varying the phase of an engine camshaft relative to the engine crankshaft, comprises a drive member 10 connected to the camshaft drive, a driven member 14 connected to the camshaft, an eccentric 20 mounted for rotation about the axis of the camshaft. The member 14 is driven via a coupling element 18 mounted about the eccentric and acting to transmit torque from the drive member to the driven member, and drive means 22, eg a one-way clutch, for rotating the eccentric to move the coupling element 18 relative to the drive and driven members 10, 14 and thereby vary the phase between the drive and driven members. To reduce noise caused by chattering of the coupling element 18 about the eccentric 20, means such as springs 19, 19 are provided for applying a constant additional force to the coupling element while the phase change mechanism is in rotation, the force acting in a direction transverse to the line of action of the reaction force reversals acting on the eccentric 20. Moreover the coupling element 18 is provided with slider blocks 13, 15 (see 15, fig 3), held for example by leaf springs 32 and bolts 30, to further reduce the noise produced by element 18. <IMAGE>

IPC 1-7
F01L 1/34

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

CPC (source: EP)
F01L 1/34409 (2013.01); **F01L 2820/035** (2013.01)

Citation (examination)
EP 0492557 A1 19920701 - ATSUGI UNISIA CORP [JP]

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
GB 2268998 A 19940126; **GB 9215560 D0 19920902**; DE 69302097 D1 19960509; DE 69302097 T2 19960905; EP 0656094 A1 19950607; EP 0656094 B1 19960403; JP H07509035 A 19951005; WO 9402716 A1 19940203

DOCDB simple family (application)
GB 9215560 A 19920722; DE 69302097 T 19930722; EP 93917884 A 19930722; GB 9301540 W 19930722; JP 50394694 A 19930722