

Title (en)

Valve timing setting system for an internal-combustion engine the camshaft of which is driven by a belt, a chain or a gear.

Title (de)

Vorrichtung zur Einstellung der Steuerzeiten an einer Brennkraftmaschine, deren Nockenwelle über einen Zahnriemen, eine Kette oder auch einen Zahnräderantrieb angetrieben wird.

Title (fr)

Dispositif pour l'ajustage du calage de la distribution d'un moteur à combustion interne dont l'arbre à cames est entraîné par courroie, chaîne ou engrenage.

Publication

EP 0362687 B1 19931020 (DE)

Application

EP 89117918 A 19890928

Priority

DE 3832812 A 19880928

Abstract (en)

[origin: EP0362687A1] Valve timing setting system for an internal-combustion engine the camshaft of which is driven by a belt, a chain or a gear. In internal-combustion engines, the maintenance of the exact timing of the gas-exchange valves and the precise operation of the injection pump is an important precondition for satisfactory functioning of the drive. An uncontrolled movement of the driving or driven shaft during assembly leads to an incorrect setting of the valve timing, and this can lead to damage to the drive. The crank shaft and the camshaft are moved into a particular position independently of one another and immovably fixed. The transmitting element is attached firmly to the shaft journals and the fixing parts are removed. <IMAGE>

IPC 1-7

F01L 1/02

IPC 8 full level

F01L 1/02 (2006.01); **F01L 1/46** (2006.01)

CPC (source: EP US)

F01L 1/024 (2013.01 - EP US); **F01L 1/46** (2013.01 - EP US); **F01L 2303/01** (2020.05 - EP US); **Y10T 29/53978** (2015.01 - EP US)

Cited by

CN104329168A; FR2897400A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0362687 A1 19900411; **EP 0362687 B1 19931020**; DE 3832812 A1 19900329; DE 58905960 D1 19931125; US 5099563 A 19920331

DOCDB simple family (application)

EP 89117918 A 19890928; DE 3832812 A 19880928; DE 58905960 T 19890928; US 40710189 A 19890914