

Title (en)

Low friction variable valve actuation device

Title (de)

Mechanismus zur variablen Ventilsteuerung mit geringer Reibung

Title (fr)

Dispositif à basse friction pour commande variable de soupape

Publication

EP 1426570 A2 20040609 (EN)

Application

EP 04000193 A 20010601

Priority

- EP 01202103 A 20010601
- US 21525300 P 20000630

Abstract (en)

A variable valve train device (110) is mounted on the engine head and is pivotable about the camshaft to alter the timing and lift of a intake valve. A command link (122) controls the rotational position of the apparatus with respect to the camshaft and is rotationally supported by a cylindrical shell bearing (126) mounted on the engine head coaxial with the camshaft. The shell bearing is supported by an hydraulic lash adjuster (128) or an adjustable ball joint to minimize mechanical lash in the device. The command link includes a ring gear (123) which meshes with a control shaft gear (28) for advancing or retarding the valve timing. The command link pivotably supports a rocker assembly (132) for following the rotary motion of the valve-opening and valve-closing cam lobes. The rocker assembly is linked to an output cam (140) disposed between the camshaft and a roller finger follower for actuating the valve.

IPC 1-7

F01L 13/00

IPC 8 full level

F01L 13/00 (2006.01)

CPC (source: EP)

F01L 13/0005 (2013.01); **F01L 13/0026** (2013.01); **F01L 13/0063** (2013.01); **F01L 2013/0073** (2013.01); **F01L 2305/00** (2020.05)

Cited by

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Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

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