

Title (en)

Valve operating system in internal combustion engine

Title (de)

Ventilsteuerungseinrichtung für eine Brennkraftmaschine

Title (fr)

Dispositif de commande de soupape pour moteur à combustion interne

Publication

**EP 1013898 A2 20000628 (EN)**

Application

**EP 99125230 A 19991217**

Priority

- JP 36438098 A 19981222
- JP 37634598 A 19981223
- JP 35180099 A 19991210

Abstract (en)

A valve operating system in an internal combustion engine includes a cam shaft provided with a valve operating cam, a rocker arm having a pair of support wall portions which are integrally connected at their base ends to a swinging support portion swingably supported on a support member mounted on a cylinder head and which are opposed to each other at a distance in a direction along the swinging axis of the swinging support portion, a support shaft supported between the support wall portions, and a roller which is rotatably supported on the support shaft with a bearing interposed therebetween so as to be in rolling contact with the valve operating cam. A lower connecting wall interconnecting lower portions of the base ends of the support wall portions is projectingly provided on the swinging support portion in a manner opposed to an outer peripheral surface of a lower portion of the roller. Thus, it is possible to increase the rigidity of the rocker arm, while avoiding an increase in size of the rocker arm.

<IMAGE>

IPC 1-7

**F01L 1/26**; F01L 1/18; F01L 1/053; F01L 1/46

IPC 8 full level

**F01L 1/053** (2006.01); **F01L 1/18** (2006.01); **F01L 1/26** (2006.01); **F01L 1/46** (2006.01)

CPC (source: EP)

**F01L 1/053** (2013.01); **F01L 1/185** (2013.01); **F01L 1/267** (2013.01); **F01L 1/46** (2013.01)

Cited by

EP2940261A3; EP2557280A4; US9556762B2

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

**EP 1013898 A2 20000628**; **EP 1013898 A3 20001004**; **EP 1013898 B1 20050803**; CA 2293000 A1 20000622; CA 2293000 C 20050802; DE 69926475 D1 20050908; DE 69926475 T2 20060406

DOCDB simple family (application)

**EP 99125230 A 19991217**; CA 2293000 A 19991221; DE 69926475 T 19991217