

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 A3 20001004 (EN)

Application

EP 99125230 A 19991217

Priority

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

Abstract (en)

[origin: EP1013898A2] 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)

Citation (search report)

- [XY] DE 19640520 A1 19980409 - REITZ DIETER DIPL ING [DE]
- [XA] US 5651336 A 19970729 - RYGIEL RONALD [US], et al
- [Y] US 4727832 A 19880301 - MIYAMURA NORIYUKI [JP], et al
- [XPA] EP 0887519 A1 19981230 - HONDA MOTOR CO LTD [JP]
- [A] US 5669342 A 19970923 - SPEIL WALTER [DE]
- [A] EP 0275714 A1 19880727 - HONDA MOTOR CO LTD [JP]
- [A] EP 0364069 A1 19900418 - HONDA MOTOR CO LTD [JP]
- [X] PATENT ABSTRACTS OF JAPAN vol. 018, no. 491 (M - 1672) 13 September 1994 (1994-09-13)

Cited by

EP2557280A4; EP2940261A3; US9556762B2

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