

Title (en)
ENGINE

Title (de)
MOTOR

Title (fr)
MOTEUR

Publication
EP 3363999 A4 20190605 (EN)

Application
EP 16831610 A 20161012

Priority
• JP 2015203543 A 20151015
• JP 2016080242 W 20161012

Abstract (en)
[origin: EP3156618A1] A rocker shaft includes a shaft member and a collar member. The shaft member includes a first end and a second end. The first end is one end of the shaft member in a direction of an axis of the rocker shaft, and is supported by a first shaft support portion. The second end is the other end of the shaft member in the direction of the axis of the rocker shaft, and is supported by a second shaft support portion. The collar member is provided separately from the shaft member. The collar member is disposed between the first end and the second end in the direction of the axis of the rocker shaft. A first rocker arm and a second rocker arm are attached to the collar member. The collar member has an outer diameter larger than each of an outer diameter of the first end and an outer diameter of the second end. The shaft member is inserted into a hole provided in the collar member.

IPC 8 full level
F01L 1/18 (2006.01); **F01L 1/26** (2006.01); **F01L 13/00** (2006.01)

CPC (source: EP)
F01L 1/181 (2013.01); **F01L 1/267** (2013.01); **F01L 13/0036** (2013.01)

Citation (search report)
• [X] JP H01110816 A 19890427 - MAZDA MOTOR
• [AD] JP 2015010552 A 20150119 - YAMAHA MOTOR CO LTD
• [A] EP 2853700 A1 20150401 - HONDA MOTOR CO LTD [JP]
• [A] JP 2003161118 A 20030606 - MITSUBISHI MOTORS CORP
• See references of WO 2017065168A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3156618 A1 20170419; EP 3156618 B1 20180613; BR 112017003899 A2 20171205; BR 112017003899 B1 20230117;
EP 3363999 A1 20180822; EP 3363999 A4 20190605; EP 3363999 B1 20211229; ES 2675287 T3 20180710; JP 2018197498 A 20181213;
TW 201713846 A 20170416; TW 201814146 A 20180416; TW I626366 B 20180611; TW I652403 B 20190301; WO 2017065168 A1 20170420

DOCDB simple family (application)
EP 16190756 A 20160927; BR 112017003899 A 20161012; EP 16831610 A 20161012; ES 16190756 T 20160927; JP 2015203543 A 20151015;
JP 2016080242 W 20161012; TW 105132340 A 20161006; TW 106106361 A 20170224