

Title (en)
TWO-VALVE ENGINE

Title (de)
ZWEIVENTILMOTOR

Title (fr)
MOTEUR À DEUX SOUPAPES

Publication
EP 3296551 B1 20201021 (EN)

Application
EP 15891808 A 20150512

Priority
JP 2015063565 W 20150512

Abstract (en)
[origin: EP3296551A1] The present teaching provides a two-valve engine configured to suppress a combustion noise occurrence while improving fuel efficiency. A two-valve engine includes: a crankshaft; a rolling bearing; a piston part; a cylinder part that cooperates with the piston part to define a combustion chamber, the cylinder part including a cylinder head part and a cylinder body part, the cylinder head part having one intake port and one exhaust port, the cylinder body part having a cylinder bore; a fuel injector part; and an ignition device arranged in one of two regions that are defined by dividing the combustion chamber by a straight line passing through a center of the intake port and a center of the exhaust port, wherein the piston part has a concave portion in a top surface thereof, the area over which the region where the ignition device is not arranged overlaps the concave portion is smaller than the area over which the region where the ignition device is arranged overlaps the concave portion, and the intake passage is arranged such that the region where the ignition device is not arranged, which overlaps the concave portion over a smaller area, is located on a straight line that is an extension of a center line of the intake passage from the center of the intake port.

IPC 8 full level
F02F 1/42 (2006.01); **F02B 23/08** (2006.01); **F02B 31/00** (2006.01); **F02F 3/26** (2006.01); **F02M 35/16** (2006.01); **F02M 61/14** (2006.01)

CPC (source: EP)
F02B 23/08 (2013.01); **F02B 31/00** (2013.01); **F02F 1/42** (2013.01); **F02F 3/26** (2013.01); **F02M 35/162** (2013.01); **F02B 2023/102** (2013.01); **F02B 2023/106** (2013.01); **F02B 2023/108** (2013.01)

Citation (examination)
DE 2918097 A1 19791108 - NISSAN MOTOR

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 3296551 A1 20180321; **EP 3296551 A4 20180321**; **EP 3296551 B1 20201021**; WO 2016181483 A1 20161117

DOCDB simple family (application)
EP 15891808 A 20150512; JP 2015063565 W 20150512