

Title (en)
Four-cycle engine

Title (de)
Viertakt Motor

Title (fr)
Moteur 4 temps

Publication
EP 1207275 A3 20030625 (EN)

Application
EP 01121944 A 20010912

Priority
JP 2000349951 A 20001116

Abstract (en)

[origin: EP1207275A2] The invention provides a four-cycle engine, in which a pair of intake valve ports openable/closable by respective intake valves and a pair of exhaust valve ports openable/closable by respective exhaust valves are provided in a cylinder head in such a manner as to be positioned on both sides of a first virtual plane containing the axial line of a cylinder bore and passing through an approximately central portion of a combustion chamber, and a pair of ignition plugs are mounted in the cylinder head, characterized by minimizing the degradation of a flame propagation condition even if there occurs accidental fire in either of both the ignition plugs. A pair of ignition plugs (80), which are disposed substantially symmetrically with respect to a second virtual plane (79) passing through the center of a combustion chamber (17R) and being perpendicular to a first virtual plane(78), are mounted in a cylinder head (15R) in such a manner as to have axial lines extending substantially in parallel to the first virtual plane(78) and to be tilted with a distance therebetween becoming smaller toward the combustion chamber (17R); and end portions, projecting in the combustion chamber (17R), of the ignition plugs (80) are disposed in a region surrounded by intake valve ports (76) and exhaust valve ports (77). <IMAGE>

IPC 1-7
F01L 1/04; F01L 1/14; F01L 1/18; F01L 1/02; F01L 1/26; F02F 1/24; F02B 75/24

IPC 8 full level
F01L 1/14 (2006.01); **F01L 1/18** (2006.01); **F01L 1/26** (2006.01); **F02B 75/24** (2006.01); F01M 11/03 (2006.01); F02B 75/02 (2006.01); F02B 75/18 (2006.01); F02F 1/24 (2006.01)

CPC (source: EP)
F01L 1/026 (2013.01); **F01L 1/14** (2013.01); **F01L 1/143** (2013.01); **F01L 1/146** (2013.01); **F01L 1/18** (2013.01); **F01L 1/26** (2013.01); **F02B 75/243** (2013.01); F01M 2011/035 (2013.01); F02B 2075/027 (2013.01); F02B 2075/1816 (2013.01); F02B 2275/34 (2013.01); F02F 1/242 (2013.01)

Citation (search report)

- [XY] US 4363300 A 19821214 - HONDA SHOICHI
- [X] US 4256068 A 19810317 - IRIMAJIRI SHOICHIRO, et al
- [Y] EP 0405468 A1 19910102 - ISUZU MOTORS LTD [JP]
- [A] US 3531234 A 19700929 - RAVENEL RAYMOND A

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1207275 A2 20020522; **EP 1207275 A3 20030625**; **EP 1207275 B1 20041103**; AT E281587 T1 20041115; CA 2360045 A1 20020516; CA 2360045 C 20050412; DE 60106846 D1 20041209; DE 60106846 T2 20050324

DOCDB simple family (application)
EP 01121944 A 20010912; AT 01121944 T 20010912; CA 2360045 A 20011029; DE 60106846 T 20010912