

Title (en)

Air-cooling type internal combustion engine and saddled vehicle having the same

Title (de)

Luftkühlungsverbrennungsmotor und Sattelfahrzeug damit

Title (fr)

Moteur à combustion interne de type à refroidissement par circulation d'air et véhicule à selle ayant celui-ci

Publication

**EP 2713033 A1 20140402 (EN)**

Application

**EP 13185284 A 20130920**

Priority

JP 2012219305 A 20121001

Abstract (en)

There is provided an air-cooling type internal combustion engine including a cylinder head body which has a cooling air duct with a sufficient cross-sectional area and which can be suitably molded by die casting. An air-cooling type internal combustion engine according to the present invention includes a cylinder head body 100, the cylinder head body 100 including: a plurality of cooling fins 10; a cam chamber wall 20 defining a cam chamber 109; a combustion chamber wall 30 defining a combustion chamber 110; an intake duct 40 through which air intake into the combustion chamber 110 is to occur; an exhaust duct 50 through which exhaust from the combustion chamber 110 is to occur; and a cooling air duct 60 for allowing cooling air to pass through the cam chamber wall 20 and the combustion chamber wall 30. The cylinder head body 100 is integrally molded from an aluminum alloy by die casting. The cylinder head body 100 further includes a cam chain chamber 70 for accommodating a cam chain 113. When viewed in the cylinder axis direction D1, the exhaust duct 50 extends in such a manner that the exhaust duct 50 becomes more distant from the cam chain chamber 70 when going from the inlet side toward the outlet side, and the exhaust duct 50 is formed so that an axis 50x of the exhaust duct 50 is linear.

IPC 8 full level

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CPC (source: EP)

**F02F 1/30** (2013.01); **F02F 1/32** (2013.01); **F02F 1/34** (2013.01)

Citation (applicant)

JP 2004116464 A 20040415 - HONDA MOTOR CO LTD

Citation (search report)

- [X] EP 1403496 A1 20040331 - HONDA MOTOR CO LTD [JP]
- [X] EP 2410164 A2 20120125 - KWANG YANG MOTOR CO [TW]
- [X] US 2012160194 A1 20120628 - YANO TAKAHIRO [JP], et al

Cited by

CN111237077A

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Designated extension state (EPC)

BA ME

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DOCDB simple family (application)

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