

Title (en)  
Forced air-cooled vehicle engine unit, and motorcycle

Title (de)  
Motorrad

Title (fr)  
Motocyclette

Publication  
**EP 2148058 A2 20100127 (EN)**

Application  
**EP 09009562 A 20090723**

Priority  

- JP 2008190450 A 20080724
- JP 2009042922 A 20090225
- JP 2009042957 A 20090225
- JP 2009114018 A 20090508

Abstract (en)  
An auxiliary air intake passage defining member 41 is connected to an air intake pipe 36 connected to a cylinder head 23. The auxiliary air intake passage defining member 41 defines an auxiliary air intake passage K1. The auxiliary air intake passage K1 is branched from a main air intake passage P1 in the air intake pipe 36 to guide intake air into a space defined adjacent to an injection nozzle of an injector at least during idling. At least a part of the auxiliary air intake passage defining member 41 is located outside a shroud 50. A portion around the injection nozzle is cooled by assist air from the auxiliary air intake passage K1 during idling. A portion around the injection nozzle is cooled by cooling wind generated by a fan 56 during the movement of a vehicle.

IPC 8 full level  
**F01P 1/08** (2006.01); **F01P 1/06** (2006.01); **F01P 1/10** (2006.01); **F02D 9/10** (2006.01); **F02F 1/28** (2006.01); **F02M 35/10** (2006.01)

CPC (source: EP US)  
**F01P 1/06** (2013.01 - EP); **F02B 61/02** (2013.01 - EP); **F02D 9/1055** (2013.01 - EP); **F02D 9/109** (2013.01 - EP); **F02M 35/10216** (2013.01 - EP); **F02M 35/10222** (2013.01 - EP); **F02M 35/108** (2013.01 - EP US); **F02M 35/162** (2013.01 - EP); **F02M 53/08** (2013.01 - EP); **F01P 2050/16** (2013.01 - EP); **F02M 69/044** (2013.01 - EP)

Citation (applicant)  

- WO 2005098231 A1 20051020 - YAMAHA MOTOR CO LTD [JP], et al
- JP 2001241326 A 20010907 - YAMAHA MOTOR CO LTD
- JP 2008190425 A 20080821 - HONDA MOTOR CO LTD

Cited by  
EP3499001A1; SE546172C2

Designated contracting state (EPC)  
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 SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2148058 A2 20100127**; **EP 2148058 A3 20130313**; **EP 2148058 B1 20150121**; ES 2534051 T3 20150416; JP 2010223211 A 20101007; TW 201016492 A 20100501; TW I445637 B 20140721

DOCDB simple family (application)  
**EP 09009562 A 20090723**; ES 09009562 T 20090723; JP 2009114018 A 20090508; TW 98123104 A 20090708