

Title (en)

COOLING FIN STRUCTURE FOR VEHICLE-MOUNTED INTERNAL COMBUSTION ENGINE

Title (de)

KÜHLRIPPENSTRUKTUR FÜR VERBRENNUNGSMOTOR EINES FAHRZEUGES

Title (fr)

STRUCTURE D'AILLETES DE REFROIDISSEMENT POUR MOTEUR À COMBUSTION INTERNE MONTÉ SUR UN VÉHICULE

Publication

**EP 2314852 A4 20150708 (EN)**

Application

**EP 09723689 A 20090220**

Priority

- JP 2009052985 W 20090220
- JP 2008080119 A 20080326

Abstract (en)

[origin: EP2314852A1] An internal combustion engine 10 mounted on a motorcycle has a forward-tilted or substantially horizontal cylinder and is provided on its upper surface with a cooling fin structure 31 including cooling fins 30 extending in a direction in which the motorcycle advances. Reinforcing bulges 34 are formed integrally with the cooling fins 30 on the surfaces of the cooling fins 30 such that the reinforcing bulges 34 of each cooling fin 30 are separated from the adjacent cooling fins 30 and from the reinforcing bulges 34 of the adjacent cooling fins 30. The respective reinforcing bulges 34 of the adjacent ones of the cooling fins 30 are arranged alternately. The respective reinforcing bulges 34 of the adjacent cooling fins 30 do not overlap each other when seen in a direction along the length of the cooling fins 30. Bottom walls 35 continuously extending in the running direction of the motorcycle are formed between the adjacent ones of the cooling fins 30. Sand and mud can hardly accumulate in the cooling fin structure 31, which enables easy cleaning of the cooling fin structure. The cooling fin structure can prevent reduction of the cooling ability thereof.

IPC 8 full level

**F02F 1/06** (2006.01); **F01P 1/02** (2006.01)

CPC (source: EP)

**F02F 1/065** (2013.01); **F01P 2001/026** (2013.01); **F02B 61/02** (2013.01)

Citation (search report)

- [Y] EP 1441114 A1 20040728 - HONDA MOTOR CO LTD [JP]
- [Y] JP S443685 Y1 19690212
- [A] JP 2007205199 A 20070816 - HONDA MOTOR CO LTD
- See references of WO 2009119208A1

Cited by

US11731502B2

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 TR

DOCDB simple family (publication)

**EP 2314852 A1 20110427; EP 2314852 A4 20150708;** AR 070726 A1 20100428; BR PI0909831 A2 20151006; BR PI0909831 B1 20191217; CN 101946078 A 20110112; JP 2009235930 A 20091015; JP 5314909 B2 20131016; TW 200946767 A 20091116; TW I360607 B 20120321; WO 2009119208 A1 20091001

DOCDB simple family (application)

**EP 09723689 A 20090220;** AR P090100721 A 20090227; BR PI0909831 A 20090220; CN 200980105236 A 20090220; JP 2008080119 A 20080326; JP 2009052985 W 20090220; TW 98106197 A 20090226