

Title (en)
V-type internal combustion engine for motorcycle

Title (de)
Motorradbrennkraftmaschine in V-Bauart

Title (fr)
Moteur à combustion interne à cylindres en V pour un motocycle

Publication
EP 0987413 B1 20031001 (EN)

Application
EP 99116636 A 19990825

Priority
JP 26070498 A 19980914

Abstract (en)
[origin: EP0987413A2] Object: To provide a V-type internal combustion engine for a motorcycle, which is intended to realize a reasonable arrangement of a lubricating oil pump and a cooling water pump for making the rear portion of a crank case compact while suppressing enlargement of the entire engine, and sufficiently ensuring a gap between the rear portion of the crank case and a rear exhaust pipe thereby reducing the adverse effect of radiation heat produced by the exhaust pipe exerted on the crank case. Solving Means: A lubricating oil pump 57 for supplying oil to portions to be lubricated of a front bank 41 and a rear bank 42, and a cooling water pump 62 for supplying cooling water to water jackets 241 and 242 of the front and rear banks 41 and 42 are disposed in front of and over a crank shaft 15, to thereby make a rear portion of a crank case 21 compact and to sufficiently ensure a gap between the rear portion of the crank case and a rear exhaust pipe. <IMAGE>

IPC 1-7
F02B 75/22; F02B 61/02; F02B 67/04

IPC 8 full level
B62M 7/02 (2006.01); **F01M 1/02** (2006.01); **F02B 61/02** (2006.01); **F02B 67/00** (2006.01); **F02B 67/04** (2006.01); **F02B 75/22** (2006.01); **F02B 75/02** (2006.01); **F02B 75/18** (2006.01)

CPC (source: EP KR)
F02B 61/02 (2013.01 - EP); **F02B 67/04** (2013.01 - EP); **F02B 75/22** (2013.01 - EP KR); **F01M 1/02** (2013.01 - EP); **F02B 2075/027** (2013.01 - EP); **F02B 2075/1808** (2013.01 - EP); **F02B 2275/20** (2013.01 - EP)

Cited by
DE10249175B4; EP1394382A1; EP2031197A1; ES2348430A1; EP1826374A1; US2014174385A1; US8925500B2; US6997073B2; US7669574B2

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
EP 0987413 A2 20000322; **EP 0987413 A3 20001213**; **EP 0987413 B1 20031001**; AR 015321 A1 20010418; BR 9904103 A 20000926; CN 1111642 C 20030618; CN 1247937 A 20000322; CO 4850638 A1 19991026; DE 69911708 D1 20031106; DE 69911708 T2 20040819; JP 2000087758 A 20000328; JP 3954732 B2 20070808; KR 100360810 B1 20021113; KR 20000023139 A 20000425

DOCDB simple family (application)
EP 99116636 A 19990825; AR P990104576 A 19990913; BR 9904103 A 19990913; CN 99118811 A 19990913; CO 99057893 A 19990913; DE 69911708 T 19990825; JP 26070498 A 19980914; KR 19990039310 A 19990914