

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 0987416 B1 20040303 (EN)**

Application  
**EP 99117155 A 19990831**

Priority  
JP 26006598 A 19980914

Abstract (en)  
[origin: EP0987416A2] Object: To provide a V-type internal combustion engine for a motorcycle, having a front bank and a rear bank, which is capable of compactly forming a rear portion of a crank case and a mission case portion continuous thereto without any interference with a lubricating oil pump and a cooling water pump. 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 provided in a crank case 21 in such a manner as to be laterally disposed in front of and over a crank shaft 15. <IMAGE>

IPC 1-7  
**F02B 75/22**; F02B 61/02

IPC 8 full level  
**B62M 7/02** (2006.01); **F02B 61/02** (2006.01); **F02B 67/00** (2006.01); **F02B 75/22** (2006.01); **F02B 75/02** (2006.01); **F02B 75/18** (2006.01); **F02F 1/24** (2006.01)

CPC (source: EP KR)  
**F02B 61/02** (2013.01 - EP); **F02B 75/22** (2013.01 - EP KR); **F02B 2075/027** (2013.01 - EP); **F02B 2075/1808** (2013.01 - EP); **F02B 2275/20** (2013.01 - EP); **F02F 2001/245** (2013.01 - EP)

Cited by  
US7481186B2; GB2471022A; GB2471022B; US11181019B2

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DOCDB simple family (publication)  
**EP 0987416 A2 20000322**; **EP 0987416 A3 20001213**; **EP 0987416 B1 20040303**; AR 015318 A1 20010418; BR 9904097 A 20000926; CN 1107158 C 20030430; CN 1247939 A 20000322; CO 4850635 A1 19991026; DE 69915199 D1 20040408; DE 69915199 T2 20040729; ES 2217659 T3 20041101; JP 2000087755 A 20000328; JP 4021068 B2 20071212; KR 100360809 B1 20021113; KR 20000023138 A 20000425; TW 404917 B 20000911

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**EP 99117155 A 19990831**; AR P990104573 A 19990913; BR 9904097 A 19990913; CN 99118813 A 19990913; CO 99057883 A 19990913; DE 69915199 T 19990831; ES 99117155 T 19990831; JP 26006598 A 19980914; KR 19990039309 A 19990914; TW 88113829 A 19990812