

Title (en)
Crank shaft supporting structure for horizontal opposed type internal combustion engine

Title (de)
Kurbelwellenunterstützung für eine Boxer-Brennkraftmaschine

Title (fr)
Support de vilebrequin pour un moteur horizontal à cylindres opposés

Publication
EP 1207292 A3 20030423 (EN)

Application
EP 01121362 A 20010906

Priority
JP 2000347645 A 20001115

Abstract (en)
[origin: EP1207292A2] Object: In a horizontal opposed type internal combustion engine, to enable rigid support of a middle journal of a crank shaft through rational utilization of first and second case halves constituting a crankcase, and to thereby contribute to a simplification in structure and a reduction in weight. Solving Means: In a horizontal opposed type internal combustion engine in which a crankcase (6) is split at a plane (P) containing the axis line (A) of a crank shaft(1) into first and second case halves (6L, 6R) connected with first and second cylinder blocks (7L, 7R), the first and second case halves (6L, 6R) are provided integrally with first and second journal supporting walls (13Lm, 13Rm) for supporting a middle journal (3m) of the crank shaft (1), the first and second journal supporting walls (13Lm, 13Rm) fronting on cylinder bores (10Lr, 10Rf) of the first and second cylinder blocks (7L, 7R), and the first and second journal supporting walls are coupled by a plurality of first bolts (19L) inserted from the side of the cylinder bore (10Lr) of the first cylinder block(7L)and disposed on both sides of and in proximity to the middle journal (3m). <IMAGE>

IPC 1-7
F02B 7/00; **F02B 75/24**

IPC 8 full level
F02B 61/04 (2006.01); **F02B 75/00** (2006.01); **F02B 75/22** (2006.01); **F02B 75/24** (2006.01); **F02F 7/00** (2006.01)

CPC (source: EP)
F02B 61/04 (2013.01); **F02B 75/005** (2013.01); **F02B 75/22** (2013.01); **F02B 75/243** (2013.01); **F02F 7/0053** (2013.01)

Citation (search report)
• [X] FR 1418021 A 19651119 - PROCEDES CHABAY
• [A] US 5579729 A 19961203 - BATZILL MANFRED [DE], et al
• [A] DE 4001514 A1 19900802 - FUJI HEAVY IND LTD [JP]

Cited by
FR3011879A1; AT510872A1; AT510872B1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1207292 A2 20020522; **EP 1207292 A3 20030423**; **EP 1207292 B1 20061129**; AT E347028 T1 20061215; CA 2360402 A1 20020515; CA 2360402 C 20060822; DE 60124847 D1 20070111; DE 60124847 T2 20070315

DOCDB simple family (application)
EP 01121362 A 20010906; AT 01121362 T 20010906; CA 2360402 A 20011029; DE 60124847 T 20010906