

Title (en)  
Lower casing of engine crankcase

Title (de)  
Unterkurbelgehäuse einer Brennkraftmaschine

Title (fr)  
Bâtiment-moteur inférieur

Publication  
**EP 1911956 A2 20080416 (EN)**

Application  
**EP 08001889 A 20040528**

Priority  
• EP 04253155 A 20040528  
• JP 2003150391 A 20030528

Abstract (en)  
In an example, an engine 1 includes a pair of left and right aluminum side members 11, 12 extending along a crankshaft 5 and disposed on the left and right thereof, and a laterally extending cross member 13 provided between the side members 11, 12. The cross member 13 comprises an aluminum cross member body 14 provided between the side members 11, 12, and a cast-iron supporting member 17 formed with a semicircular supporting recess 15 on its top surface 16 for the crankshaft 5 to be fitted in at the lower half of its journal 4, and built in the cross member body 14 while leaving the top surface 16. The side members 11, 12 and the cross member body 14 are formed together through aluminum casting by using the supporting member 17 as an insert member. A notch 23 is formed at a lower end of the supporting member 17 below the supporting recess 15. Such an arrangement can prevent casting defects from occurring in casting a lower casing of a crankcase for supporting a crankshaft.

IPC 8 full level  
**F02F 7/00** (2006.01); **B22D 19/00** (2006.01); **B22D 19/08** (2006.01)

CPC (source: EP GB)  
**B22D 19/00** (2013.01 - EP GB); **F02F 7/0007** (2013.01 - EP GB); **F02F 7/0053** (2013.01 - EP GB); **F05C 2201/021** (2013.01 - EP); **F05C 2201/0439** (2013.01 - EP)

Citation (applicant)  
JP H10331715 A 19981215 - SUZUKI MOTOR CO

Designated contracting state (EPC)  
DE

DOCDB simple family (publication)  
**EP 1482157 A1 20041201; EP 1482157 B1 20080402**; CN 100567722 C 20091209; CN 1573065 A 20050202; DE 602004012795 D1 20080515; DE 602004012795 T2 20090430; EP 1911956 A2 20080416; EP 1911956 A3 20120926; GB 0412047 D0 20040630; GB 2402171 A 20041201; GB 2402171 B 20060906; JP 2004353511 A 20041216; MY 136806 A 20081128

DOCDB simple family (application)  
**EP 04253155 A 20040528**; CN 200410048803 A 20040528; DE 602004012795 T 20040528; EP 08001889 A 20040528; GB 0412047 A 20040528; JP 2003150391 A 20030528; MY PI20042029 A 20040527