

Title (en)
Housing to be affixed to an engine

Title (de)
Gehäuse zur Befestigung auf einer Brennkraftmaschine

Title (fr)
Carter pour être fixé sur un moteur à combustion

Publication
EP 1211391 A1 20020605 (EN)

Application
EP 01128637 A 20011130

Priority
• JP 2000367627 A 20001201
• JP 2000368758 A 20001204

Abstract (en)
A mount seat 21 is formed on a bracket 13 as a housing to be affixed to an engine body 1 of a water-cooled engine, and a water-type oil cooler C having a cooling water inlet 61 and a cooling water outlet 62 is affixed to a fitting surface 21a of the mount seat 21. The bracket further has formed a pump chamber 32 of a cooling water pump, intake path and release path 34 both communicating with the pump chamber 32, first communication path 37 communicating with the release path 34 within the bracket 13, second communication paths 38a, 38b, 38c communicating with the intake path 33 within the bracket 13. The first communication path 37 and the second communication paths 38a, 38b, 38c communicate with a cooling water inlet 61 and cooling water outlet 62 of the oil cooler, respectively, at the fitting surface 21a. This configuration contributes to reducing the flow path resistance of the cooling passage for delivery of cooling water to and from the oil cooler C and improving the heat exchange efficiency of the oil cooler C. It also decreases parts and assembling steps, and improves readiness of maintenance. <IMAGE>

IPC 1-7
F01M 11/03; **F02B 67/06**

IPC 8 full level
F01M 11/03 (2006.01); **F02B 67/06** (2006.01); **F01P 5/10** (2006.01); **F01P 5/12** (2006.01)

CPC (source: EP)
F01M 11/03 (2013.01); **F02B 67/06** (2013.01); **F01P 5/10** (2013.01); **F01P 5/12** (2013.01)

Citation (search report)
• [A] US 4370957 A 19830201 - SKATSCHE OTHMAR [AT], et al
• [A] US 5647306 A 19970715 - PATEMAN RICHARD [GB]
• [A] US 5704329 A 19980106 - BUBLITZ HEIKO [DE], et al
• [PA] EP 1063397 A2 20001227 - CONCENTRIC PUMPS LTD [GB]

Cited by
EP1443187A1; DE202004018136U1; EP1953377A3; FR2871516A1; DE202004011114U1; EP1489279A1; CN100434662C; US8635984B2; US7004118B2; US8783216B2; WO2007128304A3; WO2006003336A1

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