

Title (en)

Oil module for combustion engine

Title (de)

Ölmodul für eine Brennkraftmaschine

Title (fr)

Ensemble modulaire pour la lubrification d'un moteur à combustion interne

Publication

EP 1164262 A3 20021023 (DE)

Application

EP 01113365 A 20010601

Priority

DE 10028159 A 20000607

Abstract (en)

[origin: EP1164262A2] The oil module for an internal combustion engine comprises a carrier element (10) which is made of a plastic material, covers a flange zone of the engine and integrates an oil pump (12) with a housing (13). Also claimed is a sealing ring, in particular, for use in the oil module.

IPC 1-7

F01M 11/03; B01D 35/30; F02B 77/14

IPC 8 full level

F01M 11/03 (2006.01)

CPC (source: EP US)

F01M 11/03 (2013.01 - EP US); **F01M 2011/035** (2013.01 - EP US)

Citation (search report)

- [XY] WO 9913203 A1 19990318 - MANN & HUMMEL FILTER [DE], et al
- [X] DE 19704209 A1 19980806 - MANN & HUMMEL FILTER [DE]
- [YA] US 4977870 A 19901218 - HASHIMOTO HIROSHI [JP], et al
- [A] DE 4433247 A1 19960328 - MOTOREN WERKE MANNHEIM AG [DE]
- [A] US 5771854 A 19980630 - BARTON RAYMOND A [US]

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EP1860289A3; US9239045B2; WO2011158055A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 1164262 A2 20011219; **EP 1164262 A3 20021023**; **EP 1164262 B1 20060412**; AT E323218 T1 20060415; DE 10028159 A1 20011213; DE 50109476 D1 20060524; US 2002023612 A1 20020228; US 6463904 B2 20021015

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