

Title (en)

OIL-PUMP AND VACUUM-PUMP MODULE

Title (de)

ÖLPUMPEN- UND VAKUUMPUMPENMODUL

Title (fr)

MODULE DE POMPE À HUILE ET DE POMPE À VIDE

Publication

EP 1989448 B1 20091209 (DE)

Application

EP 07704538 A 20070213

Priority

- EP 2007051362 W 20070213
- DE 202006002823 U 20060218
- DE 102006029553 A 20060626

Abstract (en)

[origin: WO2007093581A1] An oil-pump and vacuum-pump module for internal combustion engines has an oil pump (11) and a vacuum pump (13). An oil conveying means (16) of the oil pump (11) and an air conveying means (18) of the vacuum pump (13) are arranged on a common drive shaft (14) and are therefore driven jointly via a single shaft. The pump module according to the invention preferably has a common mounting face, with the result that both pumps can be mounted via one mounting face.

IPC 8 full level

F04C 11/00 (2006.01)

CPC (source: EP)

F01M 1/02 (2013.01); **F04C 2/10** (2013.01); **F04C 11/005** (2013.01); **F04C 18/344** (2013.01); **F04C 23/005** (2013.01); **F01M 2001/0238** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2007093581 A1 20070823; AT E451553 T1 20091215; DE 502007002263 D1 20100121; EP 1989448 A1 20081112; EP 1989448 B1 20091209; ES 2336617 T3 20100414

DOCDB simple family (application)

EP 2007051362 W 20070213; AT 07704538 T 20070213; DE 502007002263 T 20070213; EP 07704538 A 20070213; ES 07704538 T 20070213