

Title (en)  
Cooling water pump module

Title (de)  
Kühlwasserpumpenmodul

Title (fr)  
Module de pompe de refroidissement à eau

Publication  
**EP 1443187 B1 20070207 (DE)**

Application  
**EP 04001768 A 20040128**

Priority  
DE 10303102 A 20030128

Abstract (en)  
[origin: EP1443187A1] The engine (1) has a crankcase with a crankshaft driving a cooling water pump module (14), which is mounted on the front of the crankcase and has at least one integrated cooling water channel, and a generator via a belt. The cooling water pump module is arranged at a region off transition from the front (15) of the engine to a side wall (16) and the channel has a flow connection to an oil cooler module (19).

IPC 8 full level  
**F01P 5/10** (2006.01); **F01M 5/00** (2006.01); **F01M 11/03** (2006.01); **F01P 5/12** (2006.01); **F01P 7/16** (2006.01); **F01P 11/02** (2006.01)

CPC (source: EP)  
**F01M 5/002** (2013.01); **F01P 5/10** (2013.01); **F01M 11/03** (2013.01); **F01M 2001/1014** (2013.01); **F01M 2011/033** (2013.01); **F01P 5/12** (2013.01); **F01P 7/16** (2013.01); **F01P 11/029** (2013.01); **F01P 2050/30** (2013.01); **F01P 2060/04** (2013.01); **F01P 2070/00** (2013.01)

Cited by  
DE102012023004A1; EP1953377A3

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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