

Title (en)
Oil pump combination for an internal combustion engine

Title (de)
Ölpumpenkombination für eine Brennkraftmaschine

Title (fr)
Combinaison des pompes à huile pour un moteur à combustion interne

Publication
EP 1316683 B1 20050525 (DE)

Application
EP 02025133 A 20021109

Priority
DE 10159088 A 20011201

Abstract (en)
[origin: EP1316683A2] Oil pump combination comprises a main oil pump (10) having a pump housing for suctioning lubricating oil located in an oil collecting device (2); and an oil suction pump (54) for an exhaust gas turbocharger of an I.C. engine. At least two pump chambers are arranged in the pump housing with each chamber containing a pair of toothed wheels (42) for forming a pumping stage. Both toothed wheels of the main oil pump and drive toothed wheels of the oil suction pump are arranged under each other as well as angled toward each other. <??>Preferred Features: Both toothed wheels of the main oil pump and the oil suction pump are arranged below each other by 1/2 tooth and angled toward each other by 1/4 tooth.

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F01M 1/02; F04C 11/00; F04C 2/16

IPC 8 full level
F01M 1/02 (2006.01); **F04C 2/16** (2006.01); **F04C 11/00** (2006.01); **F01M 1/12** (2006.01)

CPC (source: EP)
F01M 1/02 (2013.01); **F01M 2001/0269** (2013.01); **F01M 2001/123** (2013.01)

Cited by
US2012051950A1; CN115507016A; US7544052B2; EP1754868A3; US6896489B2; US7967580B2; US7516729B2

Designated contracting state (EPC)
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