

Title (en)

Oil collecting device and oil pump for an internal combustion engine

Title (de)

Ölauffangvorrichtung und Ölpumpe für eine Brennkraftmaschine

Title (fr)

Dispositif de recuperation d'huile et pompe d'huile pour un moteur à combustion interne

Publication

EP 1316684 A3 20031105 (DE)

Application

EP 02023997 A 20021026

Priority

DE 10159090 A 20011201

Abstract (en)

[origin: EP1316684A2] Oil collecting device (2) comprises an oil collecting housing arranged below a crank housing and having at least two oil collecting chambers. An oil pump with two pumping stages is arranged in a first oil collecting chamber. The housing of the oil pump has an opening (48) on its upper side connecting the pressure side of a second pump stage. Oil suctioned from the second oil collecting chamber is transferred to a first oil collecting chamber. <??>Preferred Features: The opening is enclosed by a sink-like edge (50). A pressure limiting valve connected to the pressure side of the first pump stage is provided in the housing of the oil pump.

IPC 1-7

F01M 11/00; F01M 1/00; F16N 13/20

IPC 8 full level

F01M 1/00 (2006.01); **F01M 1/02** (2006.01); **F01M 1/16** (2006.01); **F01M 11/00** (2006.01); **F02F 7/00** (2006.01); **F16N 13/20** (2006.01); **F01M 1/12** (2006.01)

CPC (source: EP US)

F01M 1/02 (2013.01 - EP US); **F01M 2001/123** (2013.01 - EP US); **F01M 2011/0041** (2013.01 - EP US); **F01M 2011/007** (2013.01 - EP US)

Citation (search report)

- [XA] DE 10014368 A1 20011004 - PORSCHE AG [DE]
- [A] US 2440815 A 19480504 - WHARAM JOHN J, et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 374 (M - 1445) 14 July 1993 (1993-07-14)
- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 021 (M - 1201) 20 January 1992 (1992-01-20)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

EP 1316684 A2 20030604; **EP 1316684 A3 20031105**; **EP 1316684 B1 20050504**; AT E294918 T1 20050515; DE 10159090 A1 20030612; DE 10159090 C2 20030911; DE 50202986 D1 20050609; JP 2003193816 A 20030709; US 2003152464 A1 20030814; US 6811383 B2 20041102

DOCDB simple family (application)

EP 02023997 A 20021026; AT 02023997 T 20021026; DE 10159090 A 20011201; DE 50202986 T 20021026; JP 2002350100 A 20021202; US 30751202 A 20021202