

Title (en)

OIL-SEPARATING DEVICE FOR CRANKCASE GASES IN AN INTERNAL COMBUSTION ENGINE

Title (de)

ÖLABSCHEIDEVORRICHTUNG FÜR KURBELGEHÄUSEGASE EINER VERBRENNUNGSKRAFTMASCHINE

Title (fr)

DISPOSITIF SEPARATEUR D'HUILE POUR GAS DE CARTER DE VILEBREQUIN DANS UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1399649 A1 20040324 (DE)

Application

EP 02729807 A 20020320

Priority

- DE 0201004 W 20020320
- DE 10127819 A 20010607

Abstract (en)

[origin: WO02099255A1] The invention relates to an oil-separating device (2) for crankcase gases in an internal combustion engine, comprising a pre-separating device (28), a cyclone separating device (30), a fine separating device (32) and an optional valve device (36), which are provided on the rocker cover (4) of the internal combustion engine in the form of a cascade. The aim of the invention is to simplify the construction of the oil separating device and to make assembly easier. Said aim is achieved, whereby the pre-separating device (28), the cyclone separating device (30), the fine separating device (32) and the optional valve device (36) are arranged on the outside of the rocker cover (4) and covered by a housing part-shell (6), which, together with the external side (20) of the rocker cover (4) forms a housing for the separating device (2).

IPC 1-7

F01M 13/02; **F01M 13/04**

IPC 8 full level

F01M 13/00 (2006.01); **F01M 13/02** (2006.01); **F01M 13/04** (2006.01)

CPC (source: EP US)

F01M 13/022 (2013.01 - EP US); **F01M 13/0416** (2013.01 - EP US); **F01M 2013/0461** (2013.01 - EP US); **F01M 2013/0494** (2013.01 - EP US)

Citation (search report)

See references of WO 02099255A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 02099255 A1 20021212; CZ 2003369 A3 20030618; CZ 300560 B6 20090617; DE 10127819 A1 20030102; DE 50210817 D1 20071011; EP 1399649 A1 20040324; EP 1399649 B1 20070829; JP 2004521236 A 20040715; JP 4095957 B2 20080604; US 2003150436 A1 20030814; US 6725849 B2 20040427

DOCDB simple family (application)

DE 0201004 W 20020320; CZ 2003369 A 20020320; DE 10127819 A 20010607; DE 50210817 T 20020320; EP 02729807 A 20020320; JP 2003502347 A 20020320; US 34364803 A 20030203