

Title (en)

Blowby gas valve with integrated cyclone separator

Title (de)

Kurbelgehäuseentlüftungsventil mit integriertem Zyklonabschneider

Title (fr)

Soupape pour un dispositif de gaz du carter ayant un separateur à cyclone intégré

Publication

EP 1447531 B1 20061213 (DE)

Application

EP 04000598 A 20040114

Priority

DE 10301028 A 20030114

Abstract (en)

[origin: EP1447531A1] Crank housing ventilation valve with an integrated cyclone separator (2) comprises a valve chamber (30) defined on one side by a membrane (54) and on the opposite-lying side by a separating wall (32) separating the valve chamber from the cyclone separator. The cyclone separator has a gas inlet (6) connected to the crank housing, a gas outlet (42) connected via a guide channel (40) to the valve chamber and near the gas outlet an oil outlet (8) connected to an oil return. An intake channel connected at one end to a vacuum source passes through the cyclone separator and protrudes with its other end forming a valve seat (24) into the valve chamber. The valve seat interacts with the membrane, which is spring-loaded in the opening direction.

IPC 8 full level

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

CPC (source: EP)

F01M 13/022 (2013.01); **F01M 13/04** (2013.01); **F01M 2013/0427** (2013.01)

Cited by

DE102004033677B4; CN108167046A; WO2007020084A3

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1447531 A1 20040818; EP 1447531 B1 20061213; AT E348249 T1 20070115; DE 10301028 A1 20040729; DE 502004002256 D1 20070125

DOCDB simple family (application)

EP 04000598 A 20040114; AT 04000598 T 20040114; DE 10301028 A 20030114; DE 502004002256 T 20040114