

Title (en)
Ventilation module for a combustion engine

Title (de)
Entlüftungsmodul für einen Verbrennungsmotor

Title (fr)
Module de purge pour un moteur à combustion

Publication
EP 2937533 B1 20171220 (DE)

Application
EP 14187950 A 20141007

Priority
• EP 14165802 A 20140424
• EP 14187950 A 20141007

Abstract (en)
[origin: WO2016055373A1] A venting module (10) for an internal combustion engine comprises an oil separator (13) with an oil return line (17), and a check valve which is arranged in the oil return line (17). The check valve (20) comprises a valve housing (27), a valve body (37) which is held in the valve housing (27) such that it can be displaced as an entirety between an open position and a closed position, wherein the valve body (37) is held in the open position without prestress and as a result of gravity in the rest state of the internal combustion engine. During operation of the internal combustion engine, the valve body (37) is in the open position independently of the prevailing gas pressure if a defined liquid level in the valve housing is not exceeded, and the valve body is set up for automatic displacement into the closed position as a result of buoyancy if a defined liquid level in the valve housing is exceeded. The venting module (10) has a sealing element (12) which seals the oil return line (17) and is arranged with compression between the venting module (10) and the engine when the venting module (10) is mounted.

IPC 8 full level
F01M 13/04 (2006.01)

CPC (source: CN EP US)
F01M 13/04 (2013.01 - CN EP US); **F01M 2013/0494** (2013.01 - CN EP US); **F02F 1/24** (2013.01 - US); **F02F 7/006** (2013.01 - US)

Citation (examination)
EP 2818653 A1 20141231 - BRUSS DICHTUNGSTECHNIK [DE]

Cited by
DE102021118747B3

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2016055373 A1 20160414; CN 106795789 A 20170531; CN 106795789 B 20190611; EP 2937533 A1 20151028; EP 2937533 B1 20171220; US 2017306816 A1 20171026

DOCDB simple family (application)
EP 2015072811 W 20151002; CN 201580054419 A 20151002; EP 14187950 A 20141007; US 201515517736 A 20151002