Title (en)

FUEL TANK SYSTEM AND METHOD FOR TESTING THE LEAK-TIGHTNESS OF A FUEL TANK SYSTEM OF THIS KIND

Title (de

KRAFTSTOFFTANKSYSTEM UND VERFAHREN ZUR PRÜFUNG DER DICHTHEIT EINES SOLCHEN KRAFTSTOFFTANKSYSTEMS

Title (fr)

SYSTÈME DE RÉSERVOIR DE CARBURANT ET PROCÉDÉ DE CONTRÔLE DE L'ÉTANCHÉITÉ D'UN TEL SYSTÈME DE RÉSERVOIR DE CARBURANT

Publication

EP 3559432 B1 20210217 (DE)

Application

EP 17822581 A 20171211

Priority

- DE 102016225512 A 20161220
- EP 2017082117 W 20171211

Abstract (en

[origin: WO2018114408A1] A fuel tank system having - a fuel tank (10), - a fuel vapour filter (14), which is fluidically connected to an opening into the environment (62), - a breather line (12) leading from the fuel tank (10) to the fuel vapour filter (14), - a scavenging air line (16) leading from the fuel vapour filter (14) to a fresh gas line (18) of the internal combustion engine, - a compressor (64) integrated into the scavenging air line (16) and - a shut-off valve (60) integrated into the scavenging air line (16), which valve is arranged between an opening (50) of the scavenging air line (16) into the fresh gas line (18) and the compressor (64), is characterised in that a specified gas permeability is implemented for the compressor (64) in the event that it is not operating. A fuel tank system of this kind makes an advantageous testing of the leak-tightness of the fuel tank system possible, in that a specified pneumatic pressure is generated in at least one section of the scavenging air line (16) centrally encompassing the compressor (64), which section is specifically closed against the inflow and outflow of a gas, and then a distinction is made between an adequate and inadequate leak-tightness of this section on the basis of a change in this pressure.

IPC 8 full level

F02D 41/00 (2006.01); F02B 37/00 (2006.01); F02M 25/08 (2006.01)

CPC (source: EP)

F02D 41/0037 (2013.01); F02M 25/0818 (2013.01); F02M 25/089 (2013.01); F02B 37/00 (2013.01)

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)

DE 102016225512 A1 20180621; EP 3559432 A1 20191030; EP 3559432 B1 20210217; WO 2018114408 A1 20180628

DOCDB simple family (application)

DE 102016225512 A 20161220; EP 17822581 A 20171211; EP 2017082117 W 20171211