

Title (en)

METHOD AND APPARATUS FOR OPERATING A TANK VENTILATION SYSTEM

Title (de)

VERFAHREN UND VORRICHTUNG ZUM BETREIBEN EINES TANKENTLÜFTUNGSSYSTEMS

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR FAIRE FONCTIONNER UN SYSTÈME D'AÉRATION DE RÉSERVOIR

Publication

EP 2627889 A1 20130821 (DE)

Application

EP 11767735 A 20111012

Priority

- DE 102010048313 A 20101014
- EP 2011067832 W 20111012

Abstract (en)

[origin: WO2012049219A1] The tank ventilation system (100) has an adsorption vessel (10), a regeneration duct (50) and a pump (30). The adsorption vessel (10) serves for capturing and temporarily storing fuel vapors emerging from a fuel tank (20), wherein a purge air flow can flow through the adsorption vessel (10). The regeneration duct (50) connects the adsorption vessel (10) to an intake duct (60). In the regeneration duct (50) there is arranged a pump (30) which is designed to suck the purge air out of the adsorption vessel (10) and admix said purge air to intake air in the intake duct (60). A density of the purge air which flows in the regeneration duct (50) is determined. Furthermore, a purge air mass flow (M) flowing in the regeneration duct (50) is determined as a function of the density of the purge air and a predefined pump characteristic of the pump (30).

IPC 8 full level

F02M 25/08 (2006.01); **F02D 29/02** (2006.01); **F02D 41/00** (2006.01)

CPC (source: EP US)

F02D 29/02 (2013.01 - EP US); **F02M 25/0836** (2013.01 - EP US); **F02M 25/089** (2013.01 - EP US); **F02D 41/0042** (2013.01 - EP US); **F02D 41/0045** (2013.01 - EP US)

Citation (search report)

See references of WO 2012049219A1

Cited by

DE102018133323A1; DE102018112487A1; EP3533985A1; DE102019124923A1; KR20190001569A; DE102017210768B4; DE102020214891B4; WO2022111979A1; DE102017210768A1; US10508619B2; US10913348B2; EP3572649A1; US10738722B2; DE102018133323B4; DE102020210299A1; WO2022034180A1; DE102020210299B4; US11898507B2; DE102017223277A1; WO2019121169A1; US10941731B2; DE102017223277B4

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 102010048313 A1 20120419; CN 103180593 A 20130626; CN 103180593 B 20160309; EP 2627889 A1 20130821; EP 2627889 B1 20141008; ES 2527324 T3 20150122; US 2013213366 A1 20130822; US 9556828 B2 20170131; WO 2012049219 A1 20120419

DOCDB simple family (application)

DE 102010048313 A 20101014; CN 201180049852 A 20111012; EP 11767735 A 20111012; EP 2011067832 W 20111012; ES 11767735 T 20111012; US 201113879585 A 20111012