

Title (en)
PROCESS AND DEVICE FOR TANK VENTILATION

Title (de)
VERFAHREN UND VORRICHTUNG ZUR TANKENTLÜFTUNG

Title (fr)
PROCEDE ET DISPOSITIF POUR LA VENTILATION DE RESERVOIRS

Publication
EP 0576448 B1 19970709 (DE)

Application
EP 92905556 A 19920221

Priority
• DE 9200127 W 19920221
• DE 4109401 A 19910322

Abstract (en)
[origin: DE4109401A1] A process for alternating execution of phases with and without tank ventilation during the operation of an internal combustion engine (10) with a tank ventilator (21, 24-26) is characterized in that the ratio of the time-intervals with and without tank ventilation is chosen so that it is dependent on operating data of the engine or of the tank ventilator. Preferably the quantity measured is a measure of the quantity of fuel to be regenerated during tank ventilation, and the above-mentioned ratio is increased with respect to an initial ratio in favour of the tank ventilation time-interval if the value of the measured quantity exceeds an upper limit (Dp-SMW; FTEA-SWU). This process makes it possible to equip the corresponding device with an adsorption filter (24) and a tank ventilation valve (25) for smaller throughputs than hitherto, without the risk of fuel vapours escaping into the atmosphere. If large quantities of fuel vapor are produced, the tank ventilation time-interval is increased with respect to the basic adaptation time-interval. The smaller adsorption filter is therefore still adequately regenerated despite the smaller cross-section of the tank ventilation valve.

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F02D 41/004 (2013.01 - EP US); **F02M 25/08** (2013.01 - EP US); **F02M 25/0809** (2013.01 - EP US)

Citation (examination)
Patent Abstracts of Japan, vol. 9, no. 202 (M-405)[1925], 20. August 1985; & JP-A-6065245 (TOYOTA) 15. April 1985

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WO2005116427A1; DE10319257A1

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DE FR

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DE 9200127 W 19920221; DE 4109401 A 19910322; DE 59208691 T 19920221; EP 92905556 A 19920221; JP 50485092 A 19920221; US 11914493 A 19930922