

Title (en)
FUEL VAPOUR PURGING DEVICE FOR A FUEL TANK

Publication
EP 0288090 B1 19910925 (DE)

Application
EP 88106880 A 19851205

Priority
DE 3502573 A 19850126

Abstract (en)
[origin: US4683861A] An apparatus is disclosed for venting a fuel tank of internal combustion engines or the like, wherein fuel vapors developing in the tank are received in an intermediate storage unit containing an activated carbon filter and are delivered to the induction area of the engine in dependence upon operating conditions. The delivery is accomplished by an electrically controlled tank venting valve having a pass-through opening the cross section of which is continuously changed. This is achieved by changing the pulse duty factor of the drive pulse train for this valve. The pulse duty factor may be determined in the sense of a pure control using a family of characteristic fields in dependence on rotational speed and load of the engine, or by taking into account preferably averaged Lambda values with a reduction in the cross section of the pass-through opening of the tank vent valve as the mixture becomes richer. Further, an adaptive anticipatory control is provided which enters into the calculation of the fuel quantity to be supplied or of the fuel injection signal with a correction value (ATE) and switches over to a limit control when predetermined mixture proportions are reached. The basic adaptation in the Lambda control system for calculating the fuel supply is released only if the fuel quantities originating from tank venting are negligible.

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