

Title (en)  
Diagnosis of gas leakage

Title (de)  
Diagnose von Gasaustritt

Title (fr)  
Diagnostic de fuite de gaz

Publication  
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Application  
**EP 08105249 A 20060904**

Priority  
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• EP 06120073 A 20060904

Abstract (en)  
[origin: EP1895144A1] The invention relates to a method for estimating a leakage area in a vehicle tank assembly (10). The tank assembly (10) comprises a tank (12), a gas pump (26) in fluid communication with the rest of the tank assembly (10) and means (30) for determining a pressure in the tank assembly (10) and a gas mass flow through the gas pump (26). The method comprises the step of varying the pressure in the tank assembly (10) by applying the gas mass flow through the gas pump (26) during an area estimation time period. According to the invention, the method further comprises the steps of: - for each of a plurality of time instants during the area estimation time period, establishing an instantaneous gas mass flow relation of the gas in the tank assembly (10) in which relation the leakage area is an unknown parameter; and - estimating the leakage area by utilizing the instantaneous gas mass flow relations.

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**F02M 25/0809** (2013.01); **F02M 25/0818** (2013.01)

Citation (search report)  
• [A] US 2003213295 A1 20031120 - STREIB MARTIN [DE]  
• [A] US 2004149016 A1 20040805 - KANO MASAO [JP], et al  
• [A] JP 2004324476 A 20041118 - DENSO CORP, et al  
• [A] DE 10209483 A1 20030925 - BOSCH GMBH ROBERT [DE]

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