

Title (en)
TANK REMOVAL SYSTEM

Title (de)
TANKENTNAHMESYSTEM

Title (fr)
SYSTÈME DE SOUTIRAGE DE RÉSERVOIR

Publication
EP 2235339 A1 20101006 (DE)

Application
EP 08862914 A 20081126

Priority
• EP 2008010025 W 20081126
• DE 102007061808 A 20071219

Abstract (en)
[origin: WO2009077067A1] The invention relates to a tank removal device (1), comprising a cold start heater (6) for frozen fluids (11) from a motor vehicle tank system having at least one primary tank (2), at least one heat emission element (13, 27, 33), which is connected to at least one heating element (19) in a heat-conducting manner and conducts the heat produced in the heating element (19) into the frozen fluid (11), whereby a cold start volume (5) is melted, and to a method for removing a frozen fluid (11) from the motor vehicle tank system. In order to be able to remove the fluid (11) of the cold start volume (5) from the motor vehicle tank system, without requiring an additional ventilation device (10) or a separate removal line (20, 20'), it is provided according to the invention that the cold start volume (5) extends from a gas volume (12) above the frozen fluid (11) to the removal opening (4). The invention further relates to a method, wherein the cold start volume (5) is melted by a fluid level (O) of the frozen fluid (11) adjoining a gas volume up to a removal opening (4) of the tank system.

IPC 8 full level
F01N 3/20 (2006.01); **B60S 1/48** (2006.01); **B60S 1/50** (2006.01)

CPC (source: EP)
B60S 1/488 (2013.01); **B60S 1/50** (2013.01); **F01N 3/2066** (2013.01); **B60K 13/04** (2013.01); **B60K 2015/03427** (2013.01); **F01N 2610/02** (2013.01); **F01N 2610/10** (2013.01); **F01N 2610/1406** (2013.01); **Y02A 50/20** (2017.12); **Y02T 10/12** (2013.01)

Citation (search report)
See references of WO 2009077067A1

Cited by
CN108891793A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
DE 102007061808 A1 20090625; EP 2235339 A1 20101006; WO 2009077067 A1 20090625

DOCDB simple family (application)
DE 102007061808 A 20071219; EP 08862914 A 20081126; EP 2008010025 W 20081126