

Title (en)

METHOD FOR DETERMINING A HYDROGEN TANK PRESSURE

Title (de)

VERFAHREN ZUM ERMITTTELN EINES WASSERSTOFFTANKDRUCKS

Title (fr)

PROCÉDÉ PERMETTANT DE DÉTERMINER LA PRESSION D'UN RÉSERVOIR D'HYDROGÈNE

Publication

EP 3017236 A1 20160511 (DE)

Application

EP 14737145 A 20140626

Priority

- DE 102013011052 A 20130702
- EP 2014001735 W 20140626

Abstract (en)

[origin: CA2911197A1] The invention relates to a method for determining a tank pressure (12) in a tank (5) before the tank (5) is filled with pressurised, gaseous hydrogen, according to which method an accumulator (1), in which the hydrogen to be used to fill the tank is stored as liquid hydrogen, is connected to the tank (5) by means of a filling line (2) and a subsequent check valve (4) of the tank (5), wherein hydrogen is pumped from the accumulator (1) into the filling line (2) by means of a pump (3) and the filling-line pressure (11) arising in the filling line (2) during the pumping is measured, wherein the check valve (4) is opened if the filling-line pressure (11) exceeds the tank pressure (12), and wherein the tank pressure (12) is determined as the filling-line pressure (11) that exists when the check valve (4) is opened.

IPC 8 full level

F17C 5/00 (2006.01)

CPC (source: EP US)

F16K 15/00 (2013.01 - US); **F16K 17/02** (2013.01 - US); **F17C 5/007** (2013.01 - EP US); **F17C 5/02** (2013.01 - US);
F17C 9/02 (2013.01 - EP US); **G01L 7/024** (2013.01 - US); **G01M 3/3236** (2013.01 - EP US); **F17C 2205/0335** (2013.01 - EP US);
F17C 2221/012 (2013.01 - EP US); **F17C 2223/0161** (2013.01 - EP US); **F17C 2223/033** (2013.01 - EP US); **F17C 2225/0123** (2013.01 - EP US);
F17C 2225/036 (2013.01 - EP US); **F17C 2227/0142** (2013.01 - EP US); **F17C 2227/0302** (2013.01 - EP US); **F17C 2227/0393** (2013.01 - EP US);
F17C 2250/0626 (2013.01 - EP US); **F17C 2250/0689** (2013.01 - EP US); **F17C 2250/0694** (2013.01 - EP US); **F17C 2260/02** (2013.01 - EP US);
F17C 2270/0139 (2013.01 - EP US); **F17C 2270/0168** (2013.01 - EP US); **Y02E 60/32** (2013.01 - EP US)

Citation (search report)

See references of WO 2015000563A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102013011052 A1 20150108; BR 112015028521 A2 20170725; CA 2911197 A1 20150108; CN 105264280 A 20160120;
EP 3017236 A1 20160511; JP 2016527450 A 20160908; KR 20160029757 A 20160315; US 2016131307 A1 20160512;
WO 2015000563 A1 20150108

DOCDB simple family (application)

DE 102013011052 A 20130702; BR 112015028521 A 20140626; CA 2911197 A 20140626; CN 201480031288 A 20140626;
EP 14737145 A 20140626; EP 2014001735 W 20140626; JP 2016522320 A 20140626; KR 20157037235 A 20140626;
US 201414898604 A 20140626