

Title (en)

METHOD FOR FILLING AT LEAST ONE COMPRESSED GAS TANK WITH AT LEAST ONE GAS

Title (de)

VERFAHREN ZUM BEFÜLLEN MINDESTENS EINES DRUCKGASBEHÄLTERS MIT MINDESTENS EINEM GAS

Title (fr)

PROCEDE DE REMPLISSAGE D'AU MOINS UN RECIPIENT A GAZ SOUS PRESSION PAR AU MOINS UN GAZ

Publication

**EP 2005057 A1 20081224 (DE)**

Application

**EP 07723913 A 20070403**

Priority

- EP 2007002972 W 20070403
- DE 102006016554 A 20060407

Abstract (en)

[origin: WO2007115734A1] The method according to the invention for filling at least one compressed gas tank (8) with at least one gas, wherein a reference pressure gas tank (9) is formed in which a measurement can take place of at least one measurement variable which is relevant for the state in the reference pressure gas tank (9), wherein the compressed gas tank (8) and reference pressure gas tank (9) are flow-connected at least at times, wherein each compressed gas tank (8) and the reference pressure gas tank (9) have in each case one opening through which a gas can be filled and extracted, wherein in a filling process, at least one gas is filled through the opening into the at least one compressed gas tank (8) and at least at times into the reference pressure gas tank (9), is characterized in that a measuring sensor (4, 5) is inserted through the opening into the reference pressure gas tank, and at least one measurement variable is measured by means of said measuring sensor at least during a part of the filling process. The method according to the invention advantageously permits the production of highly accurate gas mixtures. Here, the connector (1) according to the invention can particularly advantageously be used to form a reference pressure gas tank (9) from a conventional compressed gas tank (8) such as for example a compressed gas cylinder. Measuring sensors (4) for determining the temperature and measuring sensors (5) for determining the pressure, and here in particular capacitive pressure pick-ups, have been proven to be particularly advantageous as measuring sensors.

IPC 8 full level

**F17C 13/02** (2006.01)

CPC (source: EP US)

**F17C 5/06** (2013.01 - EP US); **F17C 7/00** (2013.01 - EP US); **F17C 13/025** (2013.01 - EP US); **F17C 13/026** (2013.01 - EP US); **F17C 2221/01** (2013.01 - EP US); **F17C 2221/03** (2013.01 - EP US); **F17C 2223/0123** (2013.01 - EP US); **F17C 2223/035** (2013.01 - EP US); **F17C 2225/0123** (2013.01 - EP US); **F17C 2225/035** (2013.01 - EP US); **F17C 2227/041** (2013.01 - EP US); **F17C 2250/032** (2013.01 - EP US); **F17C 2250/043** (2013.01 - EP US); **F17C 2250/0439** (2013.01 - EP US); **F17C 2260/056** (2013.01 - EP US); **F17C 2265/025** (2013.01 - EP US); **F17C 2270/01** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**DE 102006016554 A1 20071011**; CN 101454609 A 20090610; CN 101454609 B 20110914; EP 2005057 A1 20081224; EP 2005057 B1 20181017; JP 2009532641 A 20090910; JP 5237261 B2 20130717; PL 2005057 T3 20190430; TN SN08387 A1 20100414; US 2009277531 A1 20091112; WO 2007115734 A1 20071018

DOCDB simple family (application)

**DE 102006016554 A 20060407**; CN 200780020015 A 20070403; EP 07723913 A 20070403; EP 2007002972 W 20070403; JP 2009503475 A 20070403; PL 07723913 T 20070403; TN SN08387 A 20081006; US 29586707 A 20070403