

Title (en)

Fitting for liquefied gas bottles and filling method

Title (de)

Armatur für Flüssiggasflaschen nebst Füllverfahren

Title (fr)

Armature pour bouteilles de gaz liquide et procédé de remplissage

Publication

EP 3021034 B1 20190424 (DE)

Application

EP 14192891 A 20141112

Priority

EP 14192891 A 20141112

Abstract (en)

[origin: CA2964439A1] The invention discloses a fitting compnsmg a gas tap for gas withdrawal, and an opening for refilling a liquid gas bottle, the opening can be connected in a gas-conducting manner to a hose-shaped or tubular line of the fitting, which can extend into a liquid gas bottle by at least 300 mm, if the fitting is connected with such agas bottle. It can be achieved that the line extends into the liquefied part of the gas, enabling a fast emptying though pumping. Emptying is necessary when a refilled gas bottle proves to be untight. There is an opening at the bottom side of the fitting adjacent to the hose-shaped or tubular line. The bottom side is the side adjoining the liquid gas bottle or respectively is arranged entirely in the bottle or in a bottle neck when the fitting is connected to a liquid gas bottle.

IPC 8 full level

F17C 13/04 (2006.01)

CPC (source: CN EP KR US)

F17C 5/02 (2013.01 - CN US); **F17C 13/00** (2013.01 - CN); **F17C 13/04** (2013.01 - CN EP KR US); **F17C 13/12** (2013.01 - US); **F17C 13/123** (2013.01 - CN); **F17C 2201/032** (2013.01 - EP KR US); **F17C 2201/056** (2013.01 - EP US); **F17C 2201/058** (2013.01 - EP KR US); **F17C 2203/0639** (2013.01 - EP US); **F17C 2205/0302** (2013.01 - CN); **F17C 2205/0323** (2013.01 - CN); **F17C 2205/0329** (2013.01 - EP KR US); **F17C 2205/0332** (2013.01 - EP KR US); **F17C 2205/0385** (2013.01 - EP KR US); **F17C 2205/0394** (2013.01 - EP US); **F17C 2221/035** (2013.01 - EP KR US); **F17C 2223/0153** (2013.01 - EP KR US); **F17C 2223/047** (2013.01 - EP KR US); **F17C 2225/047** (2013.01 - EP KR US); **F17C 2227/04** (2013.01 - EP KR US); **F17C 2270/0709** (2013.01 - EP US)

Cited by

EP3611423A1; WO2020035473A1; KR20210043564A; RU2763244C1; US11808408B2

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

DOCDB simple family (publication)

EP 3021034 A1 20160518; EP 3021034 B1 20190424; AU 2015345387 A1 20170427; AU 2015345387 B2 20191107; CA 2964439 A1 20160519; CA 2964439 C 20230328; CN 107002946 A 20170801; CN 107002946 B 20200421; DK 3218642 T3 20200302; EA 033994 B1 20191217; EA 201790955 A1 20171130; EP 3218642 A1 20170920; EP 3218642 B1 20191127; EP 3660381 A1 20200603; EP 3660381 B1 20230830; EP 3660381 B9 20231018; EP 3660381 C0 20230830; ES 2773443 T3 20200713; HK 1224357 A1 20170818; HR P20200242 T1 20200515; HU E047970 T2 20200528; JP 2018503032 A 20180201; JP 6612341 B2 20191127; KR 102440912 B1 20220906; KR 20170092149 A 20170810; MA 40947 A 20170920; MA 40947 B1 20210430; MA 52406 A 20210106; ME 03634 B 20200720; MX 2017006187 A 20180123; PL 3218642 T3 20200824; PT 3218642 T 20200225; RS 59947 B1 20200331; SI 3218642 T1 20200731; TN 2017000132 A1 20181019; US 10738945 B2 20200811; US 2017350559 A1 20171207; WO 2016074923 A1 20160519; ZA 201702728 B 20210526

DOCDB simple family (application)

EP 14192891 A 20141112; AU 2015345387 A 20151028; CA 2964439 A 20151028; CN 201580061232 A 20151028; DK 15797869 T 20151028; EA 201790955 A 20151028; EP 15797869 A 20151028; EP 19210220 A 20151028; EP 2015074950 W 20151028; ES 15797869 T 20151028; HK 16112626 A 20161102; HR P20200242 T 20200213; HU E15797869 A 20151028; JP 2017525523 A 20151028; KR 20177016058 A 20151028; MA 40947 A 20151028; MA 52406 A 20151028; ME P202035 A 20151028; MX 2017006187 A 20151028; PL 15797869 T 20151028; PT 15797869 T 20151028; RS P20200167 A 20151028; SI 201531083 T 20151028; TN 2017000132 A 20151028; US 201515526569 A 20151028; ZA 201702728 A 20170418