

Title (en)

MODULAR GAS EXTRACTION SYSTEM FOR PRESSURIZED GAS BOTTLES

Title (de)

MODULARES GASENTNAHMESYSTEM FÜR DRUCKGASFLASCHE

Title (fr)

SYSTÈME MODULAIRE DE PRÉLÈVEMENT DE GAZ POUR BOUTEILLES DE GAZ SOUS PRESSION

Publication

**EP 3289279 B1 20220413 (DE)**

Application

**EP 16719065 A 20160426**

Priority

- DE 102015005599 A 20150429
- EP 2016059301 W 20160426

Abstract (en)

[origin: WO2016174039A1] In order to comply with the legal requirements regarding fall safety, pressurized gas bottles having integrated valves, in which a plurality of functional supports are integrated in a removal unit, must be fitted with complex fall protection means. In addition, a new approval procedure for the entire valve must be carried out for such a valve in the event of multiple modifications, such as, for example, supplementing it with an additional function. In order to reduce the complexity related therewith, it is provided according to the invention that a removal fitting for a pressurized gas bottle has a modular design, wherein a base module comprising the shut-off element and a fall protection device securing the shut-off element complies with all legal requirements regarding fall safety and the shut-off device of the pressurized gas bottle. All the other functionalities of the removal fitting are integrated into at least one additional module which is connected to the base module in a fixed, but removable manner and without impairing fall safety.

IPC 8 full level

**F17C 13/06** (2006.01)

CPC (source: CN EP US)

**F17C 1/00** (2013.01 - EP US); **F17C 13/06** (2013.01 - CN EP US); **F17C 2201/0109** (2013.01 - EP US); **F17C 2201/056** (2013.01 - CN EP US);  
**F17C 2201/058** (2013.01 - CN EP US); **F17C 2205/0165** (2013.01 - EP US); **F17C 2205/0308** (2013.01 - CN EP US);  
**F17C 2205/0323** (2013.01 - CN EP US); **F17C 2205/0329** (2013.01 - EP US); **F17C 2205/0338** (2013.01 - CN EP US);  
**F17C 2221/011** (2013.01 - CN EP US); **F17C 2221/013** (2013.01 - CN EP US); **F17C 2221/014** (2013.01 - CN EP US);  
**F17C 2221/016** (2013.01 - CN EP US); **F17C 2221/018** (2013.01 - EP US); **F17C 2221/03** (2013.01 - EP US); **F17C 2221/031** (2013.01 - EP US);  
**F17C 2223/0123** (2013.01 - EP US); **F17C 2223/035** (2013.01 - CN EP US); **F17C 2223/036** (2013.01 - CN EP US);  
**F17C 2250/043** (2013.01 - CN EP US); **Y10T 137/7062** (2015.04 - EP US); **Y10T 137/7065** (2015.04 - EP US)

Citation (examination)

- US 4479520 A 19841030 - HOLBEN CLAIR D [US]
- FR 2979687 A1 20130308 - AIR LIQUIDE [FR]
- EP 2674660 A2 20131218 - AIR LIQUIDE [FR]

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)

**WO 2016174039 A1 20161103**; CN 107960114 A 20180424; CN 107960114 B 20200428; DE 102015005599 A1 20161103;  
EP 3289279 A1 20180307; EP 3289279 B1 20220413; ES 2916323 T3 20220630; MA 41972 A 20180307; PL 3289279 T3 20220808;  
US 10364941 B2 20190730; US 2018112825 A1 20180426

DOCDB simple family (application)

**EP 2016059301 W 20160426**; CN 201680023632 A 20160426; DE 102015005599 A 20150429; EP 16719065 A 20160426;  
ES 16719065 T 20160426; MA 41972 A 20160426; PL 16719065 T 20160426; US 201615565596 A 20160426