

Title (en)

Medical gas bottle with external protective cover

Title (de)

Medizinische Gasflasche mit äusserer Schutzhülle

Title (fr)

Bouteille de gaz médical avec coque protectrice périphérique

Publication

**EP 1643182 A3 20150121 (FR)**

Application

**EP 05300733 A 20050909**

Priority

FR 0452189 A 20040929

Abstract (en)

[origin: EP1643182A2] The equipment has a mechanical protection unit with external rigid shell formed from two sub-parts (3a, 3b). The sub-parts form a protective shell that covers entire body of a bottle and a portion of a tap or tap/pressure-regulator. Protective components (14a, 14b) are provided between the half-shells and the tap or tap/pressure-regulator. The rigid shell has an external profile with a neck (12).

IPC 8 full level

**B67D 99/00** (2010.01); **F17C 1/04** (2006.01); **F17C 13/06** (2006.01); **F17C 13/08** (2006.01)

CPC (source: EP US)

**F17C 1/04** (2013.01 - EP US); **F17C 13/002** (2013.01 - EP US); **F17C 13/06** (2013.01 - EP US); **F17C 13/084** (2013.01 - EP US); **F17C 2201/0109** (2013.01 - EP US); **F17C 2201/0119** (2013.01 - EP US); **F17C 2201/032** (2013.01 - EP US); **F17C 2201/058** (2013.01 - EP US); **F17C 2203/0646** (2013.01 - EP US); **F17C 2203/0648** (2013.01 - EP US); **F17C 2205/0115** (2013.01 - EP US); **F17C 2205/0165** (2013.01 - EP US); **F17C 2205/0196** (2013.01 - EP US); **F17C 2205/0308** (2013.01 - EP US); **F17C 2205/0323** (2013.01 - EP US); **F17C 2205/0329** (2013.01 - EP US); **F17C 2205/0338** (2013.01 - EP US); **F17C 2205/0385** (2013.01 - EP US); **F17C 2205/054** (2013.01 - EP US); **F17C 2205/057** (2013.01 - EP US); **F17C 2209/2109** (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 2223/036** (2013.01 - EP US); **F17C 2225/0123** (2013.01 - EP US); **F17C 2225/033** (2013.01 - EP US); **F17C 2260/012** (2013.01 - EP US); **F17C 2260/018** (2013.01 - EP US); **F17C 2270/0189** (2013.01 - EP US); **F17C 2270/025** (2013.01 - EP US)

Citation (search report)

- [A] US 4905855 A 19900306 - TROIANO JOSEPH M [US], et al
- [A] US 5472024 A 19951205 - BRUGEROLLE JEAN-RENAUD [FR], et al
- [A] US 5829629 A 19981103 - USHER TIMOTHY J [US]

Cited by

WO2015132506A1; FR3026157A1; KR101351871B1; FR3018339A1; FR3052845A1; FR3034490A1; FR3076592A1; FR3018606A1; AU2015228639B2; WO2015136207A1

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1643182 A2 20060405**; **EP 1643182 A3 20150121**; AU 2005211618 A1 20060413; CA 2518878 A1 20060329; CA 2518878 C 20130723; CN 1755187 A 20060405; CN 1755187 B 20100728; EP 2287517 A2 20110223; EP 2287518 A2 20110223; FR 2875891 A1 20060331; FR 2875891 B1 20080613; JP 2006095309 A 20060413; JP 2012096041 A 20120524; US 2006065672 A1 20060330

DOCDB simple family (application)

**EP 05300733 A 20050909**; AU 2005211618 A 20050920; CA 2518878 A 20050913; CN 200510105149 A 20050928; EP 10188471 A 20050909; EP 10188476 A 20050909; FR 0452189 A 20040929; JP 2005281382 A 20050928; JP 2011268083 A 20111207; US 24159505 A 20050929