

Title (en)
Evacuation of liquefied petroleum gas bottles

Title (de)
Evakuierung von Flüssiggasflaschen

Title (fr)
Vidange de bouteilles de gaz de pétrole liquéfié

Publication
EP 2275731 A1 20110119 (FR)

Application
EP 10290321 A 20100611

Priority
FR 0903523 A 20090717

Abstract (en)
The method involves cooling a liquefied petroleum gas bottle between minus 5-minus 10 degrees when the bottle contains butane and between minus 50-minus 55 degrees when the bottle contains propane. A faucet of the cooled bottle is removed. A sealing device comprising an inert gas injection orifice (9) is fitted to a neck (8) of the cooled bottle. Pressurized inert gas e.g. carbon dioxide or nitrogen, is injected by supplying the liquefied petroleum gas to the exterior. The sealing device is withdrawn from the bottle. An independent claim is also included for an installation for evacuation of a liquefied petroleum gas bottle.

Abstract (fr)
Installation de vidange de bouteilles (B) de gaz de pétrole liquéfié, qui comprend une cuve (1), un dispositif (2 à 5) de refroidissement du liquide contenu dans la cuve (1), un convoyeur (4) dans la cuve (1) faisant successivement passer les bouteilles (B) à un poste (6) de refroidissement, à un poste (6) de dévissage du robinet et à un poste (7) de refoulement du gaz contenu dans la bouteille (B) vers l'extérieur par du gaz inerte.

IPC 8 full level
F17C 5/00 (2006.01); **F17C 9/02** (2006.01)

CPC (source: EP)
F17C 5/005 (2013.01); **F17C 9/02** (2013.01); **F17C 2221/035** (2013.01); **F17C 2223/0123** (2013.01); **F17C 2223/0153** (2013.01); **F17C 2223/033** (2013.01); **F17C 2223/047** (2013.01); **F17C 2225/0153** (2013.01); **F17C 2227/0341** (2013.01); **F17C 2227/0383** (2013.01); **F17C 2227/044** (2013.01); **F17C 2260/015** (2013.01); **F17C 2260/044** (2013.01); **F17C 2270/059** (2013.01); **F17C 2270/0745** (2013.01)

Citation (applicant)
EP 1813855 A1 20070801 - AIR LIQUIDE [FR], et al

Citation (search report)
• [A] WO 2009063127 A1 20090522 - WAERTSILAE FINLAND OY [FI], et al
• [A] FR 2750689 A1 19980109 - PROVENCALE D AUTOMATION ET DE [FR]
• [A] EP 0034098 A1 19810819 - ELF ANTARGAZ [FR]
• [X] EP 1813855 A1 20070801 - AIR LIQUIDE [FR], et al

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 SE SI SK SM TR

Designated extension state (EPC)
BA ME RS

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EP 2275731 A1 20110119; EP 2275731 B1 20181107; FR 2948168 A1 20110121; FR 2948168 B1 20150227

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