

Title (en)

Process and apparatus for filling bottles with gas

Title (de)

Verfahren und Vorrichtung zum Befüllen von Flaschen mit Gas

Title (fr)

Procédé et appareillage de remplissage de bouteilles avec du gaz

Publication

**EP 1371895 A2 20031217 (EN)**

Application

**EP 03384001 A 20030515**

Priority

ES 200201113 A 20020516

Abstract (en)

Characterised in that the apparatus comprises a turner (1) on which the bottles (2,3,4) are placed, an actuator that causes the turner (1) to swivel, a pneumatic circuit that connects the aforesaid bottles (2,3,4) to a gas tank, pneumatic means (7 to 21) provided in said circuit for carrying out the venting, washing, vacuumising and filling operations, and control means that act on the actuator and on the pneumatic means (7 to 21) so as to permit automatic control of said operations. Filling of the bottles with gas is controlled by means of a mass flow meter. The gas can thus be dispensed into the bottles without removing them from the turner, thereby reducing the number of operations to be carried out for each bottle, and ensuring the quality of the bottled gas.

IPC 1-7

**F17C 5/00**; F17C 13/00; F17C 6/00; F17C 13/02

IPC 8 full level

**F17C 5/00** (2006.01)

CPC (source: EP)

**F17C 5/002** (2013.01); **F17C 2201/0109** (2013.01); **F17C 2201/058** (2013.01); **F17C 2205/0142** (2013.01); **F17C 2205/0146** (2013.01); **F17C 2205/0332** (2013.01); **F17C 2205/0335** (2013.01); **F17C 2221/013** (2013.01); **F17C 2227/04** (2013.01); **F17C 2250/032** (2013.01); **F17C 2250/043** (2013.01); **F17C 2250/0443** (2013.01); **F17C 2250/0495** (2013.01); **F17C 2260/025** (2013.01); **F17C 2270/059** (2013.01)

Cited by

CN111425755A; EP3859199A1; CN109323123A; FR2863037A1; CN108426167A; CN109209378A; EP2896870A1; US11250659B2; US12008855B2; WO2005054741A1; WO2015099622A3

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**EP 1371895 A2 20031217**; **EP 1371895 A3 20060719**; ES 2211285 A1 20040701; ES 2211285 B1 20050316

DOCDB simple family (application)

**EP 03384001 A 20030515**; ES 200201113 A 20020516