Title (en)

BOTTLE WITH CAP WHICH KEEPS THE LIQUID CONTAINED IN IT EFFERVESCENT AND FRESH EVEN AFTER PARTIAL CONSUMPTION OF THE LIQUID

Title (de)

FLASCHE MIT VERSCHLUSS, DER DIE DARIN ENTHALTENE FLÜSSIGKEIT SELBST NACH TEILWEISEM VERZEHR DER FLÜSSIGKEIT SPRUDELND UND FRISCH HÄLT

Title (fr

BOUTEILLE DOTÉE D'UN BOUCHON QUI CONSERVE LE LIQUIDE CONTENU DANS LA BOUTEILLE EFFERVESCENT ET FRAIS MÊME APRÈS SA CONSOMMATION PARTIELLE

Publication

EP 2225165 B1 20110921 (EN)

Application

EP 08849181 A 20081023

Priority

- IT 2008000662 W 20081023
- IT BL20070026 A 20071116

Abstract (en)

[origin: WO2009063519A1] The invention described here is a bottle for the holding of liquids consisting of two layers, one inside the other. The function of the inner layer (13) is to hold the liquid while that of the outer layer (12) is to encompass the former and to resist pressure. The air cavity which is created between the two layers is linked to the outside of the bottle via a fissure which follows the rim of the mouth of the bottle along the edge of the screw threads where the cap is screwed on. The cap used on this bottle has characteristics which enable us to send air into the bottle itself and to direct it into the air cavity between the two layers. Thanks to this system we can raise the level of the liquid in the bottle even after its partial consumption and the pressure previously present in the bottle will thereby return to its original level. The cap is also equipped with a vent pipe (6) which allows the air to escape from the chamber containing the liquid when the tap is closed and air is introduced into the air cavity. The vent pipe adjusts internally to the amount of air required to cover the liquid inside the bottle and is equipped with a double function float valve (18) which allows the air above the liquid to escape from the bottle and which closes when it is reached by the liquid, thus enabling the bottle to compress and the pressure inside the bottle to return to its original level. This raising of the liquid and the pressurisation of the bottle limits the evaporation space of the carbon dioxide present in the liquid and enables us to preserve its effervescence for a longer period. This instrument has been developed using the chemical principle according to which the quantity of gas dissolved, at a given temperature in a given quantity of liquid, is directly proportional to the gas pressure on the surface of the liquid.

IPC 8 full level

B65D 51/16 (2006.01); B65D 81/20 (2006.01); B65D 81/24 (2006.01); B65D 81/38 (2006.01); B65D 83/00 (2006.01)

CPC (source: EP)

B65D 51/1644 (2013.01); B65D 81/2061 (2013.01); B65D 81/24 (2013.01); B65D 81/3841 (2013.01); B65D 83/0055 (2013.01)

Cited by

CN105109801A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2009063519 A1 20090522; WO 2009063519 A4 20090723**; AT E525304 T1 20111015; EP 2225165 A1 20100908; EP 2225165 B1 20110921; IT BL20070026 A1 20080215

DOCDB simple family (application)

IT 2008000662 W 20081023; AT 08849181 T 20081023; EP 08849181 A 20081023; IT BL20070026 A 20071116