

Title (en)

APPARATUS AND METHOD FOR FILLING LIQUID IN A CONTAINER AND FOR ENRICHING WITH A GAS

Title (de)

GERÄT UND VERFAHREN ZUM EINFÜLLEN VON FLÜSSIGKEIT IN EINEN BEHÄLTER UND ZUR ANREICHERUNG MIT EINEM GAS

Title (fr)

APPAREIL ET PROCÉDÉ DE REMPLISSAGE DE LIQUIDE DANS UN RÉCIPIENT ET D'ENRICHISSEMENT AVEC UN GAZ

Publication

**EP 4223400 A1 20230809 (EN)**

Application

**EP 22155359 A 20220207**

Priority

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Abstract (en)

The present invention refers to an apparatus (1) for filling a liquid into a removable container (100) and for enriching said liquid inside said removable container (100) with gas, e.g. by carbonating. The invention further refers to a method for filling liquid into a container (100) and/or enriching the liquid with a gas. The apparatus comprises a filling head (10) with a cover plate (11) for closing an opening (101) of the container (100), having a liquid inlet port (14), a gas outlet port (12) and a gas inlet port (13), and a seal (19) for sealing the cover plate (11) with respect to the opening (101) of the container (100). The seal comprises a first surface (21) fixed to the cover plate (11) and a second surface (20) elastically movable relative to the cover plate (11). The apparatus (1) further comprises a suction pump connected to the gas outlet port (12), a pressure supply unit connectable to the gas inlet port (13), a tank to be filled with liquid and connectable to the liquid inlet port (14), and a control unit configured to operate the suction pump to lower a gas pressure inside said removable container (100) below a gas pressure acting on the liquid inside the tank.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

- US 10752483 B1 20200825 - PITTAWAY CLYDE [GB], et al
- US 5992684 A 19991130 - RUSSELL LARRY L [US]

Citation (search report)

- [A] WO 2013124236 A1 20130829 - EUROP S R L K [IT]
- [A] US 4676283 A 19870630 - CALDWELL MICHAEL C [US]

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