

Title (en)
METHOD AND FILLING UNIT FOR FILLING A BOTTLE WITH A FOOD LIQUID

Title (de)
VERFAHREN UND ABFÜLLEINHEIT ZUM FÜLLEN EINER FLASCHE MIT EINER LEBENSMITTELFÜSSIGKEIT

Title (fr)
PROCÉDÉ ET UNITÉ DE REMPLISSAGE POUR REMPLIR UNE BOUTEILLE AVEC UN ALIMENT LIQUIDE

Publication
EP 4108626 A1 20221228 (EN)

Application
EP 22179374 A 20220616

Priority
IT 202100016190 A 20210621

Abstract (en)
A filling unit (1) for bottle filling machines has a tank (9) adapted to contain a food liquid to be bottled, a filling device (10) for filling by level, which includes a body (12), an outer tube (16) extending through the inner cavity (14) of the body (12), and an inner tube (18) arranged coaxially with the outer tube (16) and movable in relation to the latter; the unit (1) also comprising a centring cone (22) arranged coaxially with the outer tube (16) and configured to provide a seal against the upper end of the neck of the bottle to be filled, a first shutter (24) which is arranged vertically movable and is configured to seal the first tube (16), an operating unit (26) designed to control the vertical movement of the first shutter (24), and a flow meter (40) adapted to emit a delivery signal for controlling the level filling device (10) .

IPC 8 full level
B67C 3/26 (2006.01); **B67C 3/28** (2006.01)

CPC (source: EP)
B67C 3/2622 (2013.01); **B67C 3/282** (2013.01); **B67C 2003/2602** (2013.01); **B67C 2003/2654** (2013.01)

Citation (applicant)
• EP 2958851 A1 20151230 - GAI MACCHINE IMBOTTIGLIATRICI S P A [IT]
• EP 2903929 A1 20150812 - GAI MACCHINE IMBOTTIGLIATRICI S P A [IT]
• US 6817386 B2 20041116 - TSUKANO KENICHI [JP], et al

Citation (search report)
• [AD] EP 2903929 B1 20170215 - GAI MACCH IMBOTTIGLIATRICI S P A [IT]
• [A] FR 3101074 A1 20210326 - PEP TECH [FR]
• [A] EP 1101998 A2 20010523 - SHIBUYA KOGYO CO LTD [JP]

Cited by
EP4446278A1

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 RS SE SI SK SM TR

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BA ME

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DOCDB simple family (publication)
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