

Title (en)
Filling device

Title (de)
Befüllvorrichtung

Title (fr)
Dispositif de remplissage

Publication
EP 2716592 A1 20140409 (EN)

Application
EP 13199887 A 20130319

Priority
• IT TO20120240 A 20120319
• EP 13160059 A 20130319

Abstract (en)
There is disclosed a filling device (10'), comprising: a tank (6); a first fluidic line (12) extending between tank (6) and a pouring opening (14); a shutter (15) displaceable between an open position and a closed position in which it prevents the passage of pourable product at a section (19) of first fluidic line (12); a first chamber (60'); a second fluidic line (22, 61') fluidically connected with opening (14) and with first chamber (60') to allow a first aeriform to flow out from article (2) when shutter (15) is in open position or to convey a second aeriform within article (2) when shutter (15) is in closed position; and a third fluidic line (41') fluidically connectable with a segment of first fluidic line (12) placed upstream of section (19); first chamber (60') is selectively connectable to tank (6) or to an exhaust (46'); fluidic line (22, 61') is connected to chamber (60'); a first valve (62') interposed along second fluidic line (22, 61') and displaceable in an open position in which it allows the flow of first aeriform present in article (2) towards first chamber (60'); a second valve (50') interposed along third fluidic line (41') and displaceable to a position in which it allows the flow of pourable product towards first chamber (60'), when shutter (15) is in closed position and first chamber (60') is fluidically connected to tank (6).
(Figure 5)

IPC 8 full level
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CPC (source: EP)
B67C 3/14 (2013.01); **B67C 3/2617** (2013.01)

Citation (search report)
• [A] EP 1584601 A1 20051012 - KHS MASCH & ANLAGENBAU AG [DE]
• [A] DE 3033678 A1 19810326 - VANDERGEETEN SA [BE]
• [A] WO 2008138472 A1 20081120 - KHS AG [DE], et al
• [A] EP 0539791 A1 19930505 - SEITZ ENZINGER NOLL MASCH [DE]
• [AD] US 2010071802 A1 20100325 - CLUESSERATH LUDWIG [DE], 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 RS SE SI SK SM TR

Designated extension state (EPC)
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EP 2641863 A1 20130925; EP 2641863 B1 20140723; EP 2641863 B2 20171206; BR 102013006827 A2 20190604; CN 103318823 A 20130925; CN 103318823 B 20170301; EP 2716592 A1 20140409; EP 2716592 B1 20141126; IT TO20120240 A1 20130920; MX 2013002996 A 20130918

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