

Title (en)
Filling machine

Title (de)
Füllmaschine

Title (fr)
Machine de remplissage

Publication
EP 1216952 A2 20020626 (DE)

Application
EP 01120679 A 20010903

Priority
DE 10064954 A 20001223

Abstract (en)
The filling element (1) has at least four gas ducts (27, 28, 29, 34). The first gas duct has a first control valve (24) to produce a controlled connection between the return gas opening (18'') and the tension gas duct (3), the second gas duct has a second control valve (25) for connecting the return gas opening and the vacuum duct (4) whilst the third gas duct has a third control valve (26) for controlled connection between the return gas duct and a flushing pipe (19) provided on the filler element and which can lead into the relevant can or container (10). The fourth gas duct contains a first throttle (35) for regulating or reducing the gas flow and provides a constant connection between the return gas opening and the return gas duct (5). The second and third gas ducts also contain throttles (30, 32).

Abstract (de)
Durch eine spezielle Ausbildung der Füllmaschine bzw. deren Füllelemente sind im wesentlichen nur durch Auswahl eines entsprechenden, die Füllelemente bzw. dort in Gaswegen angeordnete Steuerventile unterschiedlichste Füllverfahren möglich, so beispielsweise drucklose Füllung, vorzugsweise von stillen Getränken, Einkammer-Druckfüllung, vorzugsweise von Softdrinks, Dreikammer-Druckfüllung, insbesondere von sauerstoffempfindlichen und/oder mikrobiologisch kritischen CO₂-haltigen Getränken, sauerstoffarme Einkammer-Füllung, insbesondere von Bier, sauerstoffarme Dreikammer-Füllung, insbesondere von Bier sowie auch Füllverfahren mit Vorevakuierung.

IPC 1-7
B67C 3/10; **B67C 3/12**

IPC 8 full level
B67C 3/04 (2006.01); **B67C 3/10** (2006.01); **B67C 3/12** (2006.01); **B67C 3/28** (2006.01)

CPC (source: EP)
B67C 3/04 (2013.01); **B67C 3/10** (2013.01); **B67C 3/12** (2013.01); **B67C 3/286** (2013.01)

Cited by
DE102015111374A1; DE102007040262A1; JP2016508934A; ITBO20090077A1; RU2482054C2; CN106365099A; EA016745B1; CN102482068A; EP1262446A1; EP3184484A1; CN102190264A; EP2361696A3; DE102013103639A1; EP1584601A1; DE102004017205A1; US8726946B2; WO2009123493A1; WO2008101572A1; WO2010140173A1; US9695028B2; US10029901B2; US7469726B2; US9181074B2; EP3118154A1; WO2013164080A1; WO2009026993A1; JP2005298066A; EP2871150B1; JP2010519141A

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AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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EP 1216952 A2 20020626; **EP 1216952 A3 20020821**; **EP 1216952 B1 20040407**; AT E263733 T1 20040415; DE 10064954 A1 20020627; DE 50101898 D1 20040513

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