

Title (en)
IMPROVED FILLING DEVICE FOR A FILLING MACHINE

Title (de)
VERBESSERTE FÜLLVORRICHTUNG FÜR EINE FÜLLMASCHINE

Title (fr)
DISPOSITIF DE REMPLISSAGE AMÉLIORÉ POUR UNE MACHINE DE REMPLISSAGE

Publication
EP 3473590 A1 20190424 (EN)

Application
EP 17306419 A 20171019

Priority
EP 17306419 A 20171019

Abstract (en)
There is described a filling device (1) for a filling machine configured to fill receptacles (3) with a pourable product; the filling device (1) comprises: a tubular body (11) having a longitudinal axis (B), defining a central flowing channel (12) configured to deliver the pourable product to a respective receptacle (3) to be filled; a shutter (13) movable within the channel (12) between a lower position, in which the shutter (13) sealingly closes the channel (12), and an upper position, in which it (13) delimits with the channel (12) an annular passage for the pourable product; and at least one gas return conduit (35), adapted to exhaust the gas present in the respective receptacle (3) during filling thereof and including at least one transversal gas conveying portion (41), extending transversally with respect to the axis (B) and crossing the channel (12); the filling device (1) further comprises a swirl device (44) carried by the shutter (13), located upstream of the gas conveying portion (41)), with reference to the motion of the pourable product towards the respective receptacle (3), and configured to impart a swirling movement to the pourable product itself; the gas conveying portion (41) is at least partially surrounded by an outer surface (47) having, in the area contacted in use by the pourable product, a beveled configuration for guiding the swirling movement of the pourable product itself.

IPC 8 full level
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CPC (source: EP)
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Citation (applicant)
• WO 2013057695 A1 20130425 - SIDEL SPA CON SOCIO UNICO [IT]
• WO 2014102075 A1 20140703 - SIDEL SPA CON SOCIO UNICO [IT]

Citation (search report)
• [I] DE 1281878 B 19681031 - SEITZ WERKE GMBH
• [I] FR 2514340 A1 19830415 - SEITZ ENZINGER NOLL MASCH [DE]
• [X] DE 1029250 B 19580430 - HOLSTEIN & KAPPERT MASCHF
• [I] CN 104696530 A 20150610 - JIANGSU HY FILLING PACKAGING MACHINERY CO LTD
• [A] US 3604480 A 19710914 - REICHERT HANS, et al
• [A] US 3500879 A 19700317 - MEYER GEORGE L N
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CN117486153A; WO2021121592A1; EP4101809A1

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