

Title (en)
METHOD AND DEVICE FOR FILLING BOTTLES OR THE LIKE WITH A LIQUID

Publication
EP 0180828 B1 19890517 (DE)

Application
EP 85113195 A 19851017

Priority
DE 3439736 A 19841031

Abstract (en)
[origin: US4655029A] A method and apparatus for filling a bottle with an oxygen sensitive liquid such as beer in which the bottle is pre-evacuated, pressurized with pure CO₂, over-filled with liquid at constant pressure and then brought back to the proper fill level by injecting pure CO₂ and forcing the excess back into the gas pressurized liquid storage tank while the bottle is still coupled to the filling head. After uncoupling, the bottle is transported to under a closure cap applying device at which there are nozzles that project CO₂ under the device and over and around the mouth of the bottle so the space even within the cap is purged of air. The CO₂ used for purging is adequately free of air since it is taken from the storage tank to which CO₂ is returned from the bottles as a result of filling liquid displacing the CO₂ gas which is diluted only to the extent that pre-evacuation is not perfect.

IPC 1-7
B67C 3/10; **B67C 7/00**

IPC 8 full level
B67C 3/08 (2006.01); **B67C 3/10** (2006.01); **B67C 3/22** (2006.01); **B67C 3/26** (2006.01); **B67C 7/00** (2006.01)

CPC (source: EP US)
B67C 3/10 (2013.01 - EP US); **B67C 3/262** (2013.01 - EP US); **B67C 7/00** (2013.01 - EP US); **B67C 7/0086** (2013.01 - EP US)

Cited by
EP0554690A1; EP1132335A1; CN111578123A; FR2615181A1; EP4046959A1; DE102021103744A1; EP1787940B2

Designated contracting state (EPC)
BE DE FR GB IT NL

DOCDB simple family (publication)
EP 0180828 A1 19860514; **EP 0180828 B1 19890517**; BR 8505409 A 19860805; DE 3439736 A1 19860430; DE 3570231 D1 19890622; JP S61115879 A 19860603; US 4655029 A 19870407

DOCDB simple family (application)
EP 85113195 A 19851017; BR 8505409 A 19851030; DE 3439736 A 19841031; DE 3570231 T 19851017; JP 24524485 A 19851031; US 78886885 A 19851018