

Title (en)
Liquid filling nozzle

Title (de)
Flüssigkeitsfüllstutzen

Title (fr)
Ajustage de remplissage pour liquides

Publication
EP 1588948 A3 20070314 (EN)

Application
EP 05075894 A 20050415

Priority
JP 2004124912 A 20040421

Abstract (en)
[origin: EP1588948A2] A liquid filling nozzle comprises a vertical tubular nozzle body 11 having a discharge opening 27 at a lower end thereof, and an upwardly or downwardly movable plug 41 for opening or closing the discharge opening 27. The plug 41 is provided with a seal portion 51 disposed at the lower end of an outer peripheral wall thereof and shaped in conformity with the shape of the discharge opening 27. The seal portion 51 is provided with a spreader portion 52 positioned thereabove and tapered upward. The spreader portion 52 is so shaped that the liquid to be filled and discharged from the opening 27 is caused to spread by the spreader portion 52 toward a direction closer to a horizontal and as shifted from a direction close to a vertical, as the seal portion 51 is moved away from the discharge opening 27.

IPC 8 full level
B65B 39/00 (2006.01); **B67C 3/22** (2006.01); **B67C 3/26** (2006.01)

CPC (source: EP)
B65B 39/004 (2013.01); **B67C 2003/2682** (2013.01)

Citation (search report)
• [X] US 2788029 A 19570409 - SOLIE HAROLD L
• [A] EP 1338510 A1 20030827 - BMH CHRONOS RICHARDSON GMBH [DE]
• [A] NL 6804735 A 19691007

Cited by
KR101443186B1; CN103241695A; AU2007309774B2; EA014797B1; WO2011092188A1; US10472218B2; US8167007B2; WO2008051151A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR LV MK YU

DOCDB simple family (publication)
EP 1588948 A2 20051026; EP 1588948 A3 20070314; EP 1588948 B1 20100331; AT E462650 T1 20100415; DE 602005020207 D1 20100512;
DK 1588948 T3 20100607; ES 2341967 T3 20100630; JP 2005306427 A 20051104

DOCDB simple family (application)
EP 05075894 A 20050415; AT 05075894 T 20050415; DE 602005020207 T 20050415; DK 05075894 T 20050415; ES 05075894 T 20050415;
JP 2004124912 A 20040421