

Title (en)  
REPLENISHMENT DEVICE

Publication  
**EP 0366215 B1 19930210 (DE)**

Application  
**EP 89202808 A 19890926**

Priority  
DE 3836365 A 19881026

Abstract (en)  
[origin: WO9004566A1] Many filling devices used for filling transportable containers with environmentally harmful liquids are unsafe because pollution may occur, in particular, due to faulty operation. Known filling devices which must be connected to exhaust gas disposal installations when filling certain types of liquid are incompletely adapted for use with these installations. The filling device (1) according to the invention is characterized by a valve (24) arranged at the end of a filling pipe (4), an air-release valve (20) and a switch (30). The valves (24, 20) and the switch (30) can be actuated in function of the state of the coupling between the filling device (1) and the pipe socket (2) of a tank container (34). Faulty operation due to incorrect coupling of the filling device (1) is thereby precluded. At the same time, only a minimal volume of exhaust gas needs to be disposed of.

IPC 1-7  
**B67D 5/32**

IPC 8 full level  
**F17C 5/02** (2006.01); **B67D 3/00** (2006.01); **B67D 7/02** (2010.01); **B67D 7/04** (2010.01); **B67D 7/32** (2010.01); **B67D 7/34** (2010.01); **B67D 7/54** (2010.01); **F17C 13/04** (2006.01)

CPC (source: EP US)  
**B67D 7/0294** (2013.01 - EP US); **B67D 7/0478** (2013.01 - EP US); **B67D 7/34** (2013.01 - EP US); **B67D 7/54** (2013.01 - EP US); **B67D 2007/545** (2013.01 - EP US); **Y10T 137/86332** (2015.04 - EP US)

Cited by  
DE19617103A1; DE19617103C2; WO9300290A1

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0366215 A1 19900502; EP 0366215 B1 19930210**; AT E85593 T1 19930215; DE 3836365 A1 19900510; DE 58903522 D1 19930325; EP 0441820 A1 19910821; JP 2898325 B2 19990531; JP H04501399 A 19920312; US 5186224 A 19930216; US 5279341 A 19940118; WO 9004566 A1 19900503

DOCDB simple family (application)  
**EP 89202808 A 19890926**; AT 89202808 T 19890926; DE 3836365 A 19881026; DE 58903522 T 19890926; EP 8901120 W 19890926; EP 89911997 A 19890926; JP 51114789 A 19890926; US 67437791 A 19910415; US 97760392 A 19921117