

Title (en)

Funnel with piercing device for flowable product package.

Title (de)

Fülltrichter mit Schneidwerkzeug für Flüssigproduktpackung.

Title (fr)

Trémie de remplissage à moyen de perçage pour emballage de liquide.

Publication

**EP 0421538 A1 19910410 (EN)**

Application

**EP 90202603 A 19901001**

Priority

GB 8922477 A 19891005

Abstract (en)

Funnel (10) comprising an upper part (11) and a tube part (12), whereby a piercing element (15) protrudes from the upper part.

IPC 1-7

**B65D 47/00**; **B67D 3/00**

IPC 8 full level

**B67C 11/00** (2006.01); **B65D 47/00** (2006.01); **B67B 7/48** (2006.01); **B67B 7/86** (2006.01); **B67C 11/02** (2006.01); **B67D 3/00** (2006.01)

CPC (source: EP KR)

**B65D 47/00** (2013.01 - KR); **B67B 7/26** (2013.01 - EP)

Citation (search report)

- [XP] EP 0369722 A1 19900523 - DIVERSEY CORP [CA]
- [X] US 4723688 A 19880209 - MUNOZ EDWARD A [US]

Cited by

US5759501A; CN103318827A; CH717439A1; FR3105058A1; CN114829263A; FR3105059A1; CN114829264A; WO2021233821A1; WO2021123646A1; WO2021123645A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0421538 A1 19910410**; AU 6302494 A 19940721; AU 6375490 A 19910411; GB 8922477 D0 19891122; JP H03212397 A 19910917; KR 910007767 A 19910530

DOCDB simple family (application)

**EP 90202603 A 19901001**; AU 6302494 A 19940512; AU 6375490 A 19901004; GB 8922477 A 19891005; JP 26754490 A 19901004; KR 900015660 A 19900929