

Title (en)

Refill device for refillable spray dispenser and refillable spray dispenser

Title (de)

Nachfüllbarer Spender mit Nachfüllvorrichtung

Title (fr)

Appareil de pulvérisation remplissable et unité de remplissage

Publication

**EP 1726532 A2 20061129 (EN)**

Application

**EP 06010510 A 20060522**

Priority

IT MI20050191 U 20050523

Abstract (en)

The present invention relates to a refill device (4) for a refillable spray dispenser (1) comprising a generally tubular external element (7), coaxially joined to a nut screw (13) and having an end closed by a wall (9), a generally tubular internal element (8), having an end (12) closed by a wall and having at least one portion that slides within the generally tubular external element (7), adapted to rupture the wall (9) of the generally tubular external element (7), said generally tubular internal and external elements (7,8) forming a chamber for containing a liquid or solid compound. Further there are means (16,17) provided for preventing total removal of the generally tubular internal element (8) from the generally tubular external element (7), removable safety means (14) for preventing the wall (9) of the generally tubular external element (7) from being ruptured and retainer means (20) for stopping the motion of the generally tubular internal element once the wall of the generally tubular external element has been ruptured.

IPC 8 full level

**B65D 51/28** (2006.01); **B05B 11/00** (2006.01)

CPC (source: EP US)

**B05B 11/0056** (2013.01 - EP); **B05B 11/0083** (2013.01 - EP US); **B05B 11/0037** (2013.01 - EP); **B05B 11/0038** (2018.07 - US); **B05B 11/1057** (2023.01 - EP)

Citation (applicant)

US 4705191 A 19871110 - ITZEL HANSHELMUT [DE], et al

Cited by

GB2456207A; EP4086008A1; US8857738B2; WO2015175717A1; WO2008118446A3; US8777037B2; US8777065B2; US11052415B2; US11504729B2; WO2022233800A3

Designated contracting state (EPC)

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DOCDB simple family (publication)

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