

Title (en)

IMPROVED FILLING OF PROPELLANT GAS INTO POLYURETHANE SPRAY CANS

Title (de)

VERBESSERTES EINFÜLLEN VON TREIBGAS IN POLYURETHANSPRÜHDOSEN

Title (fr)

REmplissage amélioré de gaz propulseur dans des bombes aérosols de polyuréthane

Publication

**EP 3898425 B1 20230621 (EN)**

Application

**EP 19831741 A 20191220**

Priority

- BE 201805924 A 20181220
- EP 2019086771 W 20191220

Abstract (en)

[origin: WO2020128026A1] A method is described for the production of a pressure container or spray can containing a composition for forming polyurethane foam, with the following steps: closing the container, after introducing the liquid components, by securing into the opening of the container head a valve (10) having a hollow valve stem (4) centrally arranged in a round valve cup (1) that extends into the valve collar (2), and pressurizing the closed container by injecting at least one propellant gas through the valve stem (4), whereby the valve is opened by compressing the valve stem (4) relative to the valve collar (2), towards the valve cup (1), characterized in that, during the injection, the valve stem (4) is compressed, from its resting position with the valve (10) closed, over a distance of at most 85% of the compression distance corresponding to the reference point (C) on the force-compression distance curve registered on a test bench for a valve (10) of the same embodiment.

IPC 8 full level

**B65B 31/00** (2006.01); **B65D 83/42** (2006.01); **B65D 83/48** (2006.01); **B65B 7/28** (2006.01)

CPC (source: EP)

**B65B 31/003** (2013.01); **B65D 83/425** (2013.01); **B65D 83/48** (2013.01); **B65B 7/2857** (2013.01)

Citation (opposition)

Opponent : Henkel AG & Co. KGaA

- EP 2371738 A1 20111005 - SOUDAL [BE]
- WO 2011151295 A1 20111208 - SOUDAL [BE], et al
- WO 2009004097 A1 20090108 - DE SCHRIJVER ASTER [GB]
- US 10106309 B2 20181023 - HERMANS MARC [BE], et al
- US 3438408 A 19690415 - HUG RICHARD C
- US 9446894 B2 20160920 - MARTZ KEVIN ROBERT [US], et al
- US 8420059 B2 20130416 - ROBINSON PAUL WILLIAM [GB], et al
- DE 69218221 T2 19970814 - SOUDAL [BE]
- US 3117404 A 19640114 - WAYNE MILES GILBERT DE
- US 8191739 B1 20120605 - CASH RANDY S [US], et al
- LOUGHREY HARRY, RAWAT SIDDHANT: "PU Valve Opening Force", HENKEL TESTBERICHT, 1 June 2023 (2023-06-01), pages 1 - 15, XP093175826

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

**EP 2019086771 W 20191220**; BE 201805924 A 20181220; EP 19831741 A 20191220; PL 19831741 T 20191220; SI 201930617 T 20191220