

Title (en)
AEROSOL-TYPE INVERTIBLE VALVE MECHANISM AND AEROSOL PRODUCT PROVIDED WITH SAID INVERTIBLE VALVE MECHANISM

Title (de)
UMKEHRBARER AEROSOLVENTILMECHANISMUS UND AEROSOLPRODUKT MIT DIESEM UMKEHRBAREN VENTILMECHANISMUS

Title (fr)
MÉCANISME DE SOUPAPE RENVERSABLE DE TYPE AÉROSOL ET PRODUIT AÉROSOL MUNI DUDIT MÉCANISME DE SOUPAPE RENVERSABLE

Publication
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Application
EP 17827264 A 20170530

Priority

- JP 2016140662 A 20160715
- JP 2017020088 W 20170530

Abstract (en)
[origin: EP3486193A1] In an aerosol-type invertible valve mechanism, the present invention addresses the problem of preventing the occurrence of "gas entrainment" of vaporized gas in the contents, stabilizing continuous spraying of the contents and improving efficient use of invertible valve mechanism parts without especially changing the size or material of the moving valve itself. The vertical spacing (L), in the upright state, between the lower end portion of a ball valve (7), which closes an upper central cylindrical section (6b) in the upright state and prevents the inflow of vaporized gas inside the upper part of a container body into a shared invertible passage (C), and the upper end portions of outflow holes (6f), which are the beginning portions of the shared invertible passage (C) and are common to an upright inflow passage (A) and an inverted inflow passage (B), is set to be at least 3.5 mm, more preferably, at least 3.7 mm. Said setting prevents "dancing" of the ball valve (7) due to upward flow energy of the contents flowing in from the upright inflow passage (A) in the upright operation mode, and is able to prevent the occurrence of "gas entrainment" of vaporized gas in sprayed contents that occurs as a result of the gas entering the shared invertible passage (C) via the "dancing" ball valve (7).

IPC 8 full level
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CPC (source: EP)
B65D 83/36 (2013.01); **B65D 83/48** (2013.01)

Citation (search report)

- [A] DE 3433496 A1 19850328 - VALVOLE AEROSOL RES ITALIA [IT]
- [A] US 4723692 A 19880209 - MEURESCH HERBERT [DE], et al
- [A] GB 2019497 A 19791031 - PERFECT VENTIL GMBH
- See references of WO 2018012131A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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ES 2898378 T3 20220307; JP WO2018012131 A1 20190523; TW 201804082 A 20180201; TW I633237 B 20180821;
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