

Title (en)

BOTTLE CAN, PRODUCTION METHOD FOR BOTTLE CANS, AND DESIGN METHOD FOR BOTTLE CANS

Title (de)

FLASCHENDOSE, HERSTELLUNGSVERFAHREN FÜR FLASCHENDOSEN UND ENTWURFSVERFAHREN FÜR FLASCHENDOSEN

Title (fr)

BOUTEILLE CANETTE, PROCÉDÉ DE PRODUCTION DE BOUTEILLES CANETTES, ET PROCÉDÉ DE CONCEPTION POUR BOUTEILLES CANETTES

Publication

EP 3919400 A4 20221026 (EN)

Application

EP 20747773 A 20200129

Priority

- JP 2019016367 A 20190131
- JP 2019229557 A 20191219
- JP 2020003227 W 20200129

Abstract (en)

[origin: EP3919400A1] To provide a bottle can improving a strength of a bottle can in a radial direction, showing smooth and soft appearance of a reduced diameter portion between a cylindrical body portion and a mouth portion, and improving pouring performance. A bottle can made of aluminum alloy, having a base portion; a cylindrical body portion having a cylindrical shape connected to an upper end of the base portion; a reduced diameter portion in which a diameter reduces from an upper end of the cylindrical body portion to an upper side; a neck portion provided at an upper side of the reduced diameter portion; and a mouth portion having a bulge portion provided at an upper side of the neck portion and bulges out in a radial direction and a male thread portion, in which the reduced diameter portion is provided with: a convex curved portion forming a convex outer surface continuing to the upper end of the cylindrical body portion; a concave curved portion forming a concave outer surface continuing to an upper end of the convex curved portion; a lower convex portion forming a convex outer surface continuing to an upper end of the concave curved portion; and an upper concave portion forming a concave outer surface continuing an upper end of the lower convex portion and a lower end of the neck portion.

IPC 8 full level

B65D 1/02 (2006.01); **B21D 51/26** (2006.01); **B21D 51/38** (2006.01); **B65D 6/32** (2006.01); **B65D 8/00** (2006.01); **B21D 41/04** (2006.01)

CPC (source: EP)

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Citation (search report)

- [XY] JP 2002292434 A 20021008 - DAIWA CAN CO LTD
- [Y] JP 2018177250 A 20181115 - TOYO SEIKAN KAISHA LTD
- [Y] WO 2012133391 A1 20121004 - UNIVERSAL CAN CORP [JP], et al
- See also references of WO 2020158817A1

Designated contracting state (EPC)

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EP 3919400 A1 20211208; EP 3919400 A4 20221026; CN 113316544 A 20210827; JP 2020125155 A 20200820; JP 7443753 B2 20240306

DOCDB simple family (application)

EP 20747773 A 20200129; CN 202080009838 A 20200129; JP 2019229557 A 20191219