

Title (en)

BULGE FORMING APPARATUS FOR PRODUCING CANNED PRODUCT, AND CANNED PRODUCT

Title (de)

WÖLBUNGSFORMVORRICHTUNG ZUR HERSTELLUNG EINES KONSERVENPRODUKTS UND KONSERVENPRODUKT

Title (fr)

APPAREIL DE FORMATION DE RENFLEMENT SERVANT À PRODUIRE UN PRODUIT EN CONSERVE, ET PRODUIT EN CONSERVE

Publication

EP 2499059 A4 20130424 (EN)

Application

EP 10829519 A 20101109

Priority

- CN 200920269209 U 20091110
- CN 2010078551 W 20101109

Abstract (en)

[origin: WO2011057555A1] A bulge forming apparatus for producing a canned product and a canned product produced by the bulge forming apparatus are disclosed. The canned product comprises a can (1) having a mouth (13), a lid (2) having an extension (21), and contents filled in the can (1), wherein the lid (2) is fitted in the mouth (13) such that the extension (21) forms a fit with a sidewall (11) of the mouth to seal the can (1). The bulge forming apparatus (3) is configured to form at least one bulge (22) on one of the extension (21) of the lid (2) and the sidewall (11) of the mouth (13) after the lid (2) has been fitted in the mouth (13) of the can (1), and while the lid (2) is removed from the can (1), the convex surface of the at least one bulge (22) is engaged with the other of the extension (21) of the lid (2) and the sidewall (11) of the mouth (13) in such a way that the extension (21) and/or the sidewall (11) is destroyed. The apparatus can produce a canned product in a simple way and at a low cost, and the canned product has an anti-counterfeit function.

IPC 8 full level

B65D 43/02 (2006.01); **B21D 51/34** (2006.01); **B30B 1/00** (2006.01); **B65B 7/28** (2006.01); **B65D 49/12** (2006.01)

CPC (source: EP)

B21D 51/2653 (2013.01); **B65B 7/2857** (2013.01); **B65D 43/0285** (2013.01)

Citation (search report)

- [A] US 2739556 A 19560327 - WILLIAM PECHY
- [XA] GB 363401 A 19311218 - MANDER BROTHERS LTD, et al
- [A] US 4065909 A 19780103 - MUELLER MARTIN
- [A] GB 296134 A 19280830 - SAMUEL THOMPSON
- [A] US 4300700 A 19811117 - CHANG HENRY M
- [A] GB 2010788 A 19790704 - SICOPAL
- See references of WO 201105755A1

Cited by

US11365780B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2011057555 A1 20110519; CN 201603790 U 20101013; EP 2499059 A1 20120919; EP 2499059 A4 20130424

DOCDB simple family (application)

CN 2010078551 W 20101109; CN 200920269209 U 20091110; EP 10829519 A 20101109