

Title (en)

REFILL CARTRIDGE FOR A PEN APPLYING A PRODUCT WHEN MOVED OVER A SURFACE AND PROCESS FOR FILLING IT

Title (de)

NACHFÜLLPATRONE FÜR EINEN DURCH BESTREICHEN EINER OBERFLÄCHE PRODUKT ABGEBENDEN STIFT SOWIE VERFAHREN ZUM BEFÜLLEN DERSELBEN

Title (fr)

CARTOUCHE DE RECHARGE POUR BATON DELIVRANT UN PRODUIT PAR ENDUCTION D'UNE SURFACE, ET SON PROCEDE DE REMPLISSAGE

Publication

EP 0756465 B1 19981028 (DE)

Application

EP 95917325 A 19950415

Priority

- DE 4414019 A 19940422
- EP 9501423 W 19950415

Abstract (en)

[origin: US5857793A] PCT No. PCT/EP95/01423 Sec. 371 Date Nov. 18, 1996 Sec. 102(e) Date Nov. 18, 1996 PCT Filed Apr. 15, 1995 PCT Pub. No. WO95/28856 PCT Pub. Date Nov. 2, 1995The invention is associated with a refill cartridge for a stick which applies product by rubbing onto a surface, comprising a tube-like element, which is designed to be tightly closed at both ends and of which one end is designed to fit tightly onto a tube element of the stick; a longitudinally displaceable plunger with a screwthreaded bore-onto which a screwthreaded spindle of the adhesive stick projecting from the tube element is designed to be screwed-being non-rotatably guided in the tube-like element; and the tube-like element being filled with a product which bears against the plunger at one end and, the product in an extension of the screwthreaded bore, is formed throughout with a bore in which the screwthreaded spindle engages when the refill cartridge is fitted onto the stick. The bore in the product is formed via the tube-like element being releasably closed at its free end by a sealingly fitted cap-like closure element, the cap-like closure element being internally formed with a pin-like projection which fills the intended area of the bore extending throughout the product in a liquified state. After the product solidifies, removal of the cap and its associated pin-like projection leaves the bore fully formed in the product.

IPC 1-7

A45D 40/04; A45D 40/16

IPC 8 full level

B43M 11/00 (2006.01); A45D 40/00 (2006.01); A45D 40/02 (2006.01); A45D 40/04 (2006.01); A45D 40/16 (2006.01); B65D 83/00 (2006.01)

CPC (source: EP US)

A45D 40/04 (2013.01 - EP US); A45D 40/16 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 5857793 A 19990112; AT E172611 T1 19981115; BR 9507487 A 19970812; CN 1096837 C 20021225; CN 1144463 A 19970305; DE 4414019 C1 19950209; DE 59504079 D1 19981203; DK 0756465 T3 19990719; EP 0756465 A1 19970205; EP 0756465 B1 19981028; ES 2122593 T3 19981216; JP 3541040 B2 20040707; JP H09512229 A 19971209; KR 100370983 B1 20030609; TW 273504 B 19960401; WO 9528856 A1 19951102; ZA 953261 B 19960124

DOCDB simple family (application)

US 72758096 A 19961118; AT 95917325 T 19950415; BR 9507487 A 19950415; CN 95192255 A 19950415; DE 4414019 A 19940422; DE 59504079 T 19950415; DK 95917325 T 19950415; EP 9501423 W 19950415; EP 95917325 A 19950415; ES 95917325 T 19950415; JP 52732795 A 19950415; KR 19960704102 A 19960729; TW 84101188 A 19950210; ZA 953261 A 19950421