

Title (en)

Method of making a tube of antibacterial plastic material

Title (de)

Verfahren zur Herstellung einer Tube aus antibakteriellem Kunststoffmaterial

Title (fr)

Procédé de fabrication d'un tube à base de matériel plastique antibactérien

Publication

**EP 2113466 A1 20091104 (EN)**

Application

**EP 08425297 A 20080429**

Priority

EP 08425297 A 20080429

Abstract (en)

A flexible tube made of a plastic material is described, particularly for packaging cosmetic, pharmaceutical and food products, which is obtained by extrusion of polyethylene (or of mixtures thereof) with an additive having antibacterial properties added so as to obtain a material adapted to eliminate in a very short time the bacterial flora that may be deposited on the external or on the internal surface of the tube and which may propagate inside the product contained in the tube, which can act as a culture bed. The additive preferably contains from 1.8#° to 2.5#° in weight of nanometric silver and constitutes from 4.8% to 5.5% in weight of the plastic material used to produce the tube. The cap closing the tube is also advantageously injection moulded using the same material as that used to produce the tube.

IPC 8 full level

**B65D 35/08** (2006.01); **A61J 1/00** (2006.01)

CPC (source: EP)

**A61J 1/00** (2013.01); **B65D 35/08** (2013.01)

Citation (applicant)

- US 2006207961 A1 20060921 - KURTZ KELLY [CA]
- EP 1616549 A1 20060118 - OTSUKA PHARMA CO LTD [JP]
- US 6179141 B1 20010130 - NAKAMURA KENJI [JP]
- EP 1795449 A1 20070613 - TOYO SEIKAN KAISHA LTD [JP]

Citation (search report)

- [X] US 2006207961 A1 20060921 - KURTZ KELLY [CA]
- [X] EP 1616549 A1 20060118 - OTSUKA PHARMA CO LTD [JP]
- [X] US 6179141 B1 20010130 - NAKAMURA KENJI [JP]
- [X] EP 1795449 A1 20070613 - TOYO SEIKAN KAISHA LTD [JP]

Cited by

DE102015111582A1; EP3888605A1; ITRM20110382A1; EP2394931A1; ITMI20101048A1; AU2016293094B2; DE202015103747U1; EP2977400A1; US10492963B2; WO2017009448A1

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Designated extension state (EPC)

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DOCDB simple family (publication)

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