

Title (en)

APPLICATOR WITH A 3D PRINTED APPLICATOR COMPONENT ATTACHED IN A SPECIAL WAY

Title (de)

APPLIKATOR MIT EINER AUF SPEZIELLE ART UND WEISE ANGEBRACHTEN 3D-GEDRUCKTEN APPLIKATORKOMPONENTE

Title (fr)

APPLICATEUR DOTÉ D'UN COMPOSANT D'APPLICATEUR IMPRIMÉ EN 3D FIXÉ DE MANIÈRE SPÉCIALE

Publication

EP 4091500 A1 20221123 (EN)

Application

EP 21175278 A 20210521

Priority

EP 21175278 A 20210521

Abstract (en)

The invention relates to an applicator (1) for applying a cosmetic, care or pharmaceutical product to skin or hair or an adhesive to any substrate comprising at least one first applicator component (2) made of polymer material and having a 3D printed texture as a result of its manufacture by 3D printing, and comprising at least one second applicator component (3) materially bonded to the first applicator component (2), characterized in that a joining material (11) is interposed between the first (2) and the second applicator component (3), in which said joining material (11) is made of the same polymer material family as the first applicator component (2) and in which the said joining material (11), when the first (2) and the second applicator component (3) are joined, has been introduced in its uncured state between the first (2) and the second applicator component (3) and has subsequently been brought to cure and thereby joins the applicator components (2, 3) to one another, whereby the same type of chemical linkage exists between the joining material (11) and the first applicator component (2) as it exists within the first applicator component (2) and whereby a chemical linkage and/or a mechanically form-fitting bond is also existing between the joining material (11) and the second applicator component (3).

IPC 8 full level

A46D 1/00 (2006.01); **A46B 1/00** (2006.01); **A46B 3/04** (2006.01)

CPC (source: EP)

A46B 1/00 (2013.01); **A46B 3/04** (2013.01); **A46D 1/0207** (2013.01); **A46B 2200/1053** (2013.01)

Citation (search report)

- [A] US 2010307529 A1 20101209 - SCHWAB FRIEDRICH [DE], et al
- [A] US 2007033760 A1 20070215 - DUMLER NORBERT [DE]
- [A] US 2007186950 A1 20070816 - ROEDER GEORG [DE]
- [A] DE 102007049574 A1 20090423 - SCHWAN STABLO COSMETICS GMBH [DE]
- [A] US 2009214284 A1 20090827 - GUERET JEAN-LOUIS H [FR]
- [A] US 2011164914 A1 20110707 - CAULIER ERIC [FR]
- [A] US 2020237086 A1 20200730 - CRAPET YANN [FR], et al

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4091500 A1 20221123

DOCDB simple family (application)

EP 21175278 A 20210521