

Title (en)

Applicator comprising twisted bristles

Title (de)

Auftragsvorrichtung mit schraubenförmigen Borsten

Title (fr)

Ensemble d'application comportant des fibres torsadées

Publication

EP 1070463 B1 20040804 (FR)

Application

EP 00401919 A 20000704

Priority

FR 9909528 A 19990722

Abstract (en)

[origin: EP1070463A1] The applicator consists of a reservoir (2) for the product and an applicator brush with a holder (3), a rod (5) and a bristle tip (4). The bristles (9) have a cross-section (S13) with one or more surface cavities and spiral twists. The bristles can be in one tuft aligned with the rod or a series of radial tufts held between twisted wires, depending on the product to be applied. They are between 2 and 25 mm long, having a cross-section fitting inside a circle of 0.06 and 0.30 mm diameter, and spiral grooves with a pitch of 2 - 9 mm. The cross-sectional shape of the bristles can be geometrical, e.g. in the form of a cross, star, crescent, hollow cylinder or polygon, or various letters of the alphabet.

IPC 1-7

A45D 34/04; **A46D 1/00**; **D01D 5/253**

IPC 8 full level

A45D 29/00 (2006.01); **A45D 34/04** (2006.01); **A46B 3/18** (2006.01); **A46B 9/02** (2006.01); **A46D 1/00** (2006.01); **B05C 17/00** (2006.01); **B65D 83/00** (2006.01); **D01D 5/253** (2006.01)

CPC (source: EP US)

A45D 34/045 (2013.01 - EP US); **A46B 3/18** (2013.01 - EP US); **A46B 9/021** (2013.01 - EP US); **A46D 1/00** (2013.01 - EP US); **A46D 1/0238** (2013.01 - EP US); **A46D 1/0246** (2013.01 - EP US); **D01D 5/253** (2013.01 - EP US)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1070463 A1 20010124; **EP 1070463 B1 20040804**; AR 024896 A1 20021030; AT E272336 T1 20040815; BR 0003442 A 20010313; CA 2314828 A1 20010122; CA 2314828 C 20050111; CN 1282557 A 20010207; DE 60012637 D1 20040909; DE 60012637 T2 20050804; ES 2230039 T3 20050501; FR 2796532 A1 20010126; FR 2796532 B1 20020201; JP 2001061546 A 20010313; JP 2004249129 A 20040909; JP 3749427 B2 20060301; MX PA00007070 A 20020424; US 6390708 B1 20020521

DOCDB simple family (application)

EP 00401919 A 20000704; AR P000103760 A 20000721; AT 00401919 T 20000704; BR 0003442 A 20000719; CA 2314828 A 20000717; CN 00124265 A 20000721; DE 60012637 T 20000704; ES 00401919 T 20000704; FR 9909528 A 19990722; JP 2000223127 A 20000724; JP 2004142961 A 20040512; MX PA00007070 A 20000719; US 62170400 A 20000721