

Title (en)
APPARATUS FOR PRODUCING BRISTLE ARRANGEMENTS FOR BRUSHES

Title (de)
VORRICHTUNG ZUM HERSTELLEN VON BORSTENFELDERN FÜR BÜRSTEN

Title (fr)
DISPOSITIF POUR FABRIQUER DES ZONES DE SOIES POUR DES BROSSES

Publication
EP 2557961 A1 20130220 (DE)

Application
EP 11710696 A 20110318

Priority
• DE 102010015118 A 20100416
• EP 2011001343 W 20110318

Abstract (en)
[origin: WO2011128020A1] An apparatus (1) for producing bristle arrangements for brushes, in particular toothbrushes, having a bristle supply (2) and an apparatus (3) for extracting individual bundles (4) of bristles from the bristle supply (2), and also having a transporting apparatus for transporting the bundles (4) of bristles by way of at least one hollow line (8) by means of a stream of gas or air in perforations in a bundle-retaining plate, is characterized in that the apparatus (3) for extracting the bundles (4) of bristles from the bristle supply (2) has at least one bundle holder (6), and in that the bundle holder(s) (6) of the extraction means (3), the inner contour (10) of the hollow line(s) (8) and the perforations in the bundle-retaining plate are each contoured in a manner corresponding to the bundle contour which is desired in the bristle arrangement.

IPC 8 full level
A46D 3/04 (2006.01)

CPC (source: EP KR US)
A46D 1/08 (2013.01 - EP US); **A46D 3/04** (2013.01 - EP KR US); **A46D 3/045** (2013.01 - EP US)

Citation (search report)
See references of WO 2011128020A1

Cited by
EP3332668A1; EP2886010B1; EP2886010A1

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)
DE 102010015118 A1 20111020; CN 102892329 A 20130123; CN 102892329 B 20141112; EP 2557961 A1 20130220;
EP 2557961 B1 20140409; JP 2013524881 A 20130620; JP 5818875 B2 20151118; KR 101752024 B1 20170628; KR 20130079999 A 20130711;
TW 201200069 A 20120101; TW I516225 B 20160111; US 2013038115 A1 20130214; US 9192227 B2 20151124; WO 2011128020 A1 20111020

DOCDB simple family (application)
DE 102010015118 A 20100416; CN 201180024151 A 20110318; EP 11710696 A 20110318; EP 2011001343 W 20110318;
JP 2013504149 A 20110318; KR 20127026730 A 20110318; TW 100110892 A 20110330; US 201113641152 A 20110318