

Title (en)

METHOD FOR PRODUCING BRUSHES, PARTICULARLY TOOTHBRUSHES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON BÜRSTEN, INSbesondere ZAHNBÜRSTEN

Title (fr)

PROCÉDÉ POUR PRODUIRE DES BROSSES, EN PARTICULIER DES BROSSES À DENTS

Publication

EP 2337474 A2 20110629 (DE)

Application

EP 09777899 A 20090814

Priority

- EP 2009005927 W 20090814
- DE 102008039778 A 20080826

Abstract (en)

[origin: WO2010025820A2] The invention relates to the use of carrier plates having holes for fiber bundles and at least one hole or recess for a soft elastic element used for producing brushes, particularly toothbrushes. The fiber bundles are inserted into the holes, and the fastening ends of the fiber bundle protruding out of the holes are attached to the carrier plate by fusing. The hole or recess for a soft elastic element is thereby at least largely kept away from the fused material. The soft elastic element is produced by injecting in an injection mold through the hole or recess, forming a layer of the soft elastic material on the side of the fused fastening ends of the fiber bundle. The carrier plate is combined with a brush body before or after injecting the soft elastic material. To this end, the brush body is either produced separately and connected to the carrier plate by welding or the like, or the carrier plate is encapsulated by the mass of the brush body.

IPC 8 full level

A46B 3/04 (2006.01); **A46B 3/06** (2006.01); **A46D 3/00** (2006.01)

CPC (source: EP KR)

A46B 3/06 (2013.01 - EP KR); **A46B 9/04** (2013.01 - EP KR); **A46D 3/005** (2013.01 - EP); **A46D 3/06** (2013.01 - EP);
A46B 2200/1066 (2013.01 - EP)

Citation (search report)

See references of WO 2010025820A2

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 102008039778 A1 20100304; CN 102159115 A 20110817; CN 102159115 B 20141224; EP 2337474 A2 20110629;
EP 2337474 B1 20140917; KR 20110056381 A 20110527; WO 2010025820 A2 20100311; WO 2010025820 A3 20100527

DOCDB simple family (application)

DE 102008039778 A 20080826; CN 200980133164 A 20090814; EP 09777899 A 20090814; EP 2009005927 W 20090814;
KR 20117005352 A 20090814