

Title (en)

Method to produce anchorless bristled tooth brushes

Title (de)

Verfahren zum Herstellen von ankerlos beborsteten Zahnbürsten

Title (fr)

Procédé de fabrication de brosses à dents à poils non ancrés

Publication

EP 2130454 B1 20151028 (DE)

Application

EP 08010409 A 20080607

Priority

EP 08010409 A 20080607

Abstract (en)

[origin: EP2130454A1] The method involves inserting a bristle bundle (22) into a retaining recess (64) of a tool (60) of a bristling machine. The bristle bundle is adjusted at ends of tapered bristles (40) by a pin (66) guided into the retaining recess. Tip (42) of each of the bristles are mechanically processed before inserting into the retaining recess, where each bristle has a tapered section pointing at the tip of the bristles and a cylindrical section (50) with an obtuse end (46). The cylindrical section is attached to the tapered section. An independent claim is also included for a bristling machine i.e. anchor free tufting machine, for manufacturing an anchorless bristled toothbrush.

IPC 8 full level

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

CPC (source: EP US)

A46B 3/00 (2013.01 - EP US); **A46B 9/04** (2013.01 - EP US); **A46D 1/00** (2013.01 - EP US); **A46D 1/0276** (2013.01 - EP US);
A46D 3/00 (2013.01 - EP US); **A46D 3/045** (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2130454 A1 20091209; EP 2130454 B1 20151028; CN 102056507 A 20110511; CN 102056507 B 20140122; CN 103767313 A 20140507;
CN 103767313 B 20160629; EP 2526815 A2 20121128; EP 2526815 A3 20121212; EP 2526815 B1 20180418; US 2011109149 A1 20110512;
US 2013333132 A1 20131219; US 8534769 B2 20130917; US 9173480 B2 20151103; WO 2009146909 A2 20091210;
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EP 2009003999 W 20090604; US 201313952017 A 20130726; US 99152809 A 20090604