

Title (en)  
SELF-RIGHTING TOOTHBRUSH

Title (de)  
SELBSTAUFRICHTENDE ZAHNBÜRSTE

Title (fr)  
BROSSE À DENTS À REDRESSEMENT AUTOMATIQUE

Publication  
**EP 3349615 A4 20190522 (EN)**

Application  
**EP 16847382 A 20160916**

Priority

- US 201514856166 A 20150916
- US 201615046967 A 20160218
- US 201615173309 A 20160603
- US 2016052135 W 20160916

Abstract (en)  
[origin: WO2017049084A1] A self-righting toothbrush includes a head section mounting a set of frontwardly extending bristles and a tail section having a rearwardly extending lateral asymmetry. A medial section has a pivot surface that allows the toothbrush to pivot and roll on a horizontal support surface. The head and tail sections have respective centers of mass. In a non-bristles up position, one or both of the head and tail section centers of mass are spaced from a vertical plane that includes a pivot point where the pivot surface contacts the support surface and is perpendicular to a toothbrush rolling direction. Due to a moment imbalance dominated by the tail section center of mass, a rotational moment induces the toothbrush to pivot about the neutral pivot axis to a bristles up position in which both centers of mass are aligned in the vertical plane.

IPC 8 full level  
**A46B 5/00** (2006.01); **A46B 9/04** (2006.01); **A46B 15/00** (2006.01); **A46B 17/02** (2006.01)

CPC (source: EP)  
**A46B 5/00** (2013.01); **A46B 9/04** (2013.01); **A46B 17/02** (2013.01)

Citation (search report)

- [X] US 5956796 A 19990928 - LODATO FRANCO [US]
- [X] CH 703696 A2 20120315 - ZETTEL DR ROLAND [CH]
- [I] US 7007335 B1 20060307 - DOAT ARNAUD [FR]
- See references of WO 2017049084A1

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)  
**WO 2017049084 A1 20170323**; EP 3349615 A1 20180725; EP 3349615 A4 20190522

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