

Title (en)
Tooth-brush having a head with a variable bending angle

Title (de)
Zahnbürstekopf mit einem veränderlichen Biegewinkel

Title (fr)
Brosse à dents dont la tête à un angle de pliage variable

Publication
EP 0648448 B1 19980902 (EN)

Application
EP 94116102 A 19941012

Priority
IT MI932179 A 19931014

Abstract (en)
[origin: EP0648448A1] Brush for cleaning teeth, comprising a support handle and a bristle-carrying head joined via a flexible hinge, the axis of which is arranged in a plane essentially parallel to the plane of the head and is oriented perpendicularly with respect to the longitudinal axis of the brush. This hinge consists of an assembly of two flexible, thin, side bridge-pieces formed as one piece with the handle and the head and constituting the main element for joining and connecting together the latter, and of a mass of elastomeric filling material injected into the space between said bridge-pieces. The handle, the head and the bridge-pieces are made of a relatively rigid material (for example polypropylene) having a chemical affinity with the softer material (for example a polyolefin-based elastomer) constituting the filling mass. The hardness of this mass determines the rigidity of the hinge, depending on the intended use of the brush (soft, medium or hard; for adults or for children). <IMAGE>

IPC 1-7
A46B 1/00; **A46B 5/00**

IPC 8 full level
A46B 5/00 (2006.01)

CPC (source: EP)
A46B 5/0062 (2013.01); **A46B 5/007** (2013.01); **A46B 2200/1066** (2013.01)

Cited by
EP2229841A1; WO9837788A1; US5863102A; DE19608226A1; AU737732B2; US5946758A; US5970564A; US10512323B2; US9603441B2; WO2008017996A2; US5758383A; US6073299A; CN102355834A; KR101398283B1; AU2010224515B2; WO2009146498A1; WO2010106523A1; US6327735B1; US6314606B1; US6442787B2; US8739351B2; WO2007016066A1; WO9812948A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0648448 A1 19950419; **EP 0648448 B1 19980902**; AT E170369 T1 19980915; DE 69412958 D1 19981008; DE 69412958 T2 19990211; IT 1271530 B 19970530; IT MI932179 A0 19931014; IT MI932179 A1 19950414

DOCDB simple family (application)
EP 94116102 A 19941012; AT 94116102 T 19941012; DE 69412958 T 19941012; IT MI932179 A 19931014