

Title (en)
TOOTHBRUSH PROVIDED WITH AN ARTICULATED ARM BEARING A PROTECTIVE CAP

Title (de)
ZAHNBÜRSTE MIT EINEM EINE SCHUTZKAPPE TRAGENDEM GELENKARM

Title (fr)
BROSSE A DENTS MUNIE D'UN BRAS ARTICULE PORTANT UN CAPOT DE PROTECTION

Publication
EP 1446036 B1 20070117 (FR)

Application
EP 02796843 A 20021114

Priority
• FR 0203895 W 20021114
• FR 0115103 A 20011122

Abstract (en)
[origin: FR2832299A1] The invention concerns a toothbrush (10) comprising a head (14) which is arranged at one longitudinal front end (X-X) of a handle (12) globally made of a single piece, wherein the head (14) comprises soft brushing elements (20) on its upper surface (16), equipped with an arm (30) whereof one end is articulated, and the opposite free end is equipped with a protective cap (36) for the brushing element (20), wherein the general thickness of the arm (30) gradually increases from its articulating end (34) to the cap (36) so as to form a profile projecting on a longitudinal surface (22) of the rear portion (28) of the handle (12), whereby the grip surface of the handle (12) is increased. The invention is characterized in that the articulation (34) of the arm (30) on the handle (12) is designed to enable it to describe at least two different rotational movements about two substantially orthogonal geometrical axes (A1, A2).
[origin: FR2832299A1] The toothbrush (10) comprises a head (14) at a longitudinal end in front of a handle (12). The head comprises flexible brushing elements (20) on its upper face (16). There is an arm (30) hinged at one end (34), the opposite end having a protection cap for the brushing elements. The thickness of the arm increases progressively from its hinged end to the cap so as to form a projecting profile on the longitudinal face (22) of the handle rear portion (28). The arm hinge allows it to describe two distinct rotational movements about two geometrical orthogonal axes.

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

CPC (source: EP US)
A46B 17/04 (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

Designated extension state (EPC)
AL LT LV MK RO SI

DOCDB simple family (publication)
FR 2832299 A1 20030523; FR 2832299 B1 20041105; AU 2002361317 A1 20030610; AU 2002361317 B2 20081218; CA 2467192 A1 20030530; CA 2467192 C 20110104; DE 60217707 D1 20070308; DE 60217707 T2 20071115; EP 1446036 A2 20040818; EP 1446036 B1 20070117; JP 2005509475 A 20050414; JP 4156519 B2 20080924; US 2005039283 A1 20050224; US 7310848 B2 20071225; WO 03043460 A2 20030530; WO 03043460 A3 20031224

DOCDB simple family (application)
FR 0115103 A 20011122; AU 2002361317 A 20021114; CA 2467192 A 20021114; DE 60217707 T 20021114; EP 02796843 A 20021114; FR 0203895 W 20021114; JP 2003545149 A 20021114; US 49656204 A 20041101