

Title (en)

MULTI-SIDED VIBRATING AND CLEANSING TOOTHBRUSH

Title (de)

MEHRSEITIGE VIBRIERENDEN UND REINIGENDE ZAHNBÜRSTE

Title (fr)

BROSSE À DENTS À PLUSIEURS CÔTÉS NETTOYANTE ET VIBRANTE

Publication

EP 3539418 A1 20190918 (EN)

Application

EP 16921308 A 20161125

Priority

- KR 20160151439 A 20161114
- KR 2016013736 W 20161125

Abstract (en)

The present invention relates to a multi-sided cleaning toothbrush using vibration, which includes a bottom part (11) made of a resilient material and a bristle fixing part (13) for fixing bristles (12) on an upper surface of the bottom part (11). A plurality of bristles (12) are arranged in multiple rows on the bottom part (13), and the bottom part (11) is divided into three parts in a longitudinal direction and is folded in a C-shape to form a head part (14). A grip part (16) of the toothbrush is coupled to the rear surface of the bottom part (11), and the head part (14) folded in C-shape is in close contact with teeth. The head part has an I-shape mode where it is unfolded in an elongated shape and in a U-shape mode where it is bent in a round shape according to the arrangement form of the teeth to easily brush the teeth. The grip part (16) of the toothbrush can be coupled to the head part (14).

IPC 8 full level

A46B 13/02 (2006.01); **A46B 9/02** (2006.01); **A46B 9/04** (2006.01)

CPC (source: EP KR US)

A46B 9/025 (2013.01 - EP); **A46B 9/026** (2013.01 - EP); **A46B 9/028** (2013.01 - EP KR US); **A46B 9/04** (2013.01 - KR); **A46B 9/045** (2013.01 - EP US); **A46B 13/023** (2013.01 - EP KR US); **A46B 2200/1066** (2013.01 - EP KR US)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3539418 A1 20190918; **EP 3539418 A4 20200805**; CN 110290725 A 20190927; CN 110290725 B 20210810; JP 2019537495 A 20191226; KR 101923642 B1 20190227; KR 20180054074 A 20180524; US 2020054122 A1 20200220; WO 2018088613 A1 20180517

DOCDB simple family (application)

EP 16921308 A 20161125; CN 201680090813 A 20161125; JP 2019547050 A 20161125; KR 2016013736 W 20161125; KR 20160151439 A 20161114; US 201616348347 A 20161125