Title (en)

REDUCING VIBRATION-INDUCED SOUND IN A HAIR-CUTTING UNIT FOR A ROTARY ELECTRIC SHAVER

Title (de

RÉDUZIERUNG VON VIBRATIONSINDUZIERTEM SCHALL IN EINER HAARSCHNEIDEEINHEIT FÜR EINEN ELEKTRISCHEN ROTATIONSRASIERER

Title (fr)

RÉDUCTION DU BRUIT INDUIT PAR DES VIBRATIONS DANS UNE UNITÉ DE COUPE DE CHEVEUX POUR UN RASOIR ÉLECTRIQUE ROTATIF

Publication

EP 4378645 A1 20240605 (EN)

Application

EP 22210439 A 20221130

Priority

EP 22210439 A 20221130

Abstract (en)

In the field of rotary electric shavers, a hair-cutting unit is provided, which comprises a generally cup-shaped external cutting member (10) having a circumferential annular flange (11); a rotatably arranged internal cutting member which is covered by the external cutting member (10); and a supporting member (30) configured to support the external cutting member (10) in an assembled condition of the hair-cutting unit. In said assembled condition of the hair-cutting unit and in a direction in which a central axis of the hair-cutting unit extends, the supporting member (30) only locally supports the flange (11) of the external cutting member (10) by contacting the flange (11) of the external cutting member (10) exclusively at the position of areas of the flange (11) which are vibrational node areas in the flange (11). In this way, reduction of vibration-induced sound in the hair-cutting unit is obtained.

IPC 8 full level

B26B 19/14 (2006.01)

CPC (source: EP)

B26B 19/14 (2013.01); B26B 19/143 (2013.01)

Citation (search report)

- [XAI] EP 3643460 A1 20200429 KONINKLIJKE PHILIPS NV [NL]
- [A] WO 2016091750 A1 20160616 KONINKL PHILIPS NV [NL]
- [A] CN 112192621 A 20210108 SHENZHEN SOOCAS TECH CO LTD
- [A] EP 3895856 A1 20211020 KONINKLIJKE PHILIPS NV [NL]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4378645 A1 20240605; WO 2024115242 A1 20240606

DOCDB simple family (application)

EP 22210439 Á 20221130; ÉP 2023082775 W 20231123