

Title (en)
SHAVER AND BLADE FLOATING STRUCTURE

Title (de)
RASIERAPPARAT UND KLINGENSCHWIMMSTRUKTUR

Title (fr)
RASOIR ET STRUCTURE FLOTTANTE DE LAME

Publication
EP 3827939 A4 20210707 (EN)

Application
EP 18927498 A 20180725

Priority
CN 2018097052 W 20180725

Abstract (en)
[origin: EP3827939A1] A floating rotating structure and personal care device, massager, the floating rotating structure comprises a first hinge, the first hinge (500) has a penetrating first matching groove(510); a second hinge (600), the top of the second hinge has a matching portion(610), and a limiting structure (220) provided between the first matching groove (510) and the matching portion (610) for preventing relative rotation is separable along the central axis of the first matching groove (510), the matching portion (610) is provided with a first central hole that penetrates to the bottom of the second hinge; an elastic member (800), the elastic member penetrates the first matching groove (510) and the first central hole of the second hinge (600), and the two ends of the elastic member (800) can be respectively pressed against the two external components connected to the first hinge (500) and the second hinge (600) respectively. In the above structure, when the external force is applied, the limiting structure separates, and the elastic member is compressed so that the first hinge (500) drives the external components to rotate by 360°. When the external force is reduced, the elastic member elastically returns to move upwards, thereby achieving up and down floating.

IPC 8 full level
B26B 19/14 (2006.01)

CPC (source: EP KR RU)
B26B 19/14 (2013.01 - EP KR RU); **B26B 19/145** (2013.01 - EP); **B26B 19/38** (2013.01 - RU); **B26B 19/3806** (2013.01 - KR);
B26B 19/3853 (2013.01 - KR)

Citation (search report)
• [A] EP 0757613 A1 19970212 - DESSILANI TERESIO [IT]
• [A] US 2005172491 A1 20050811 - BEUGELS JOHANNES [NL]
• [A] CN 204160507 U 20150218 - WANG BAOHUA
• [A] US 3890705 A 19750624 - TIETJENS EDUARD WILLEM
• See also references of WO 2020019200A1

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 3827939 A1 20210602; EP 3827939 A4 20210707; EP 3827939 B1 20240508; KR 102560870 B1 20230727; KR 20210024057 A 20210304;
RU 2762888 C1 20211223; WO 2020019200 A1 20200130

DOCDB simple family (application)
EP 18927498 A 20180725; CN 2018097052 W 20180725; KR 20217002077 A 20180725; RU 2021101328 A 20180725