

Title (en)
VIBRATING APPARATUS FOR HOUSEHOLD USE

Publication
EP 0349076 A3 19910403 (DE)

Application
EP 89201677 A 19890626

Priority
DE 3822332 A 19880701

Abstract (en)
[origin: EP0349076A2] A vibrating apparatus for household use, in particular dry-shaving or hair-cutting apparatus, in which rotary movements of a bipolar permanent magnet (9) constructed in the form of a rotor are converted into vibratory movements of a vibrating tool by means of a lever system (13), which prestresses the drive mechanism in such a way that the rotor (9) can perform oscillatory movements about a rest position, the bipolar, permanent-magnet rotor (9) without pole shoe being arranged in the U-shaped stator of a single-phase synchronous motor. <IMAGE>

IPC 1-7
B26B 19/28

IPC 8 full level
B26B 19/28 (2006.01); **H02K 33/02** (2006.01); **H02K 33/06** (2006.01)

CPC (source: EP US)
B26B 19/282 (2013.01 - EP US); **Y10T 74/18184** (2015.01 - EP US)

Citation (search report)

- [A] EP 0045107 A1 19820203 - PHILIPS NV [NL]
- [A] DE 1151307 B 19630711 - SIEMENS ELEKTROGERAETE GMBH
- [A] GB 424044 A 19350213 - LANDIS & GYR A I G
- [AD] DE 2032520 A1 19720113 - MOSER GMBH KUNO
- [AD] DE 3404297 A1 19850808 - PHILIPS PATENTVERWALTUNG [DE]
- [AD] US 3333172 A 19670725 - BRAILSFORD HARRISON D

Cited by
CN111265389A

Designated contracting state (EPC)
AT DE ES FR GB IT

DOCDB simple family (publication)
EP 0349076 A2 19900103; EP 0349076 A3 19910403; EP 0349076 B1 19930929; AT E95105 T1 19931015; CN 1020872 C 19930526; CN 1039551 A 19900214; DE 3822332 A1 19900104; DE 58905739 D1 19931104; ES 2046450 T3 19940201; JP H0252691 A 19900222; RU 1829992 C 19930723; SU 1748639 A3 19920715; US 5012147 A 19910430

DOCDB simple family (application)
EP 89201677 A 19890626; AT 89201677 T 19890626; CN 89106354 A 19890628; DE 3822332 A 19880701; DE 58905739 T 19890626; ES 89201677 T 19890626; JP 16714689 A 19890630; SU 4614462 A 19890628; SU 4614553 A 19890627; US 37336789 A 19890628