

Title (en)  
DENTA-MANDIBULAR SOUND-TRANSMITTING TOOTHBRUSH

Title (de)  
DENTA-MANDIBULÄRE TON-AUSSENDENDE ZAHNBÜRSTE

Title (fr)  
BROSSE A DENTS A EMISSION SONORE DENTO-MANDIBULAIRE

Publication  
**EP 1820283 A2 20070822 (EN)**

Application  
**EP 05826081 A 20051130**

Priority  

- US 2005043245 W 20051130
- US 63439804 P 20041208
- US 65279105 P 20050214

Abstract (en)  
[origin: WO2006062778A2] A device and method for transmitting sound waves between a signal source and a user's ears, wherein the sound waves bypass the air. The sound waves are conducted by the user's teeth and bones to the user's ears, where they are perceived as sound. Sound-transmitting toothbrushes and the like are described to transmit and/ or conduct sound to the user's ear, while the user is brushing his or her teeth. The toothbrush head and a signal source are configured to produce sound waves for transmission through the toothbrush head to the user's mouth, and a tension controller is configured to control the volume of the sound waves based on the pressure applied by the toothbrush head. The signal source may produce sound waves directly or with the assistance of a transducer. The signal source may be replaceable, connect to a replaceable cartridge, or connect to an adaptor capable of downloading data to allow the signal source data to be replaceable. The tension controller may include gap spacing between the transducer coil and transducer plate. The tension controller may also include a boost switch configured as a bypass switch, activation signal, or force sensor.

IPC 8 full level  
**A46B 9/02** (2006.01); **A46B 15/00** (2006.01); **A61H 19/00** (2006.01); **G06F 17/00** (2006.01); **G09F 27/00** (2006.01); **H04B 3/00** (2006.01); **H04R 25/00** (2006.01)

CPC (source: EP)  
**A46B 15/0002** (2013.01); **A46B 15/0028** (2013.01); **A46B 15/0042** (2013.01); **A61C 17/22** (2013.01); **A61C 17/221** (2013.01); **H04R 1/028** (2013.01); **A46B 15/0012** (2013.01); **A46B 2200/1066** (2013.01); **H04R 2460/13** (2013.01)

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

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**WO 2006062778 A2 20060615**; **WO 2006062778 A3 20070208**; AU 2005314391 A1 20060615; AU 2005314391 B2 20080821; AU 2005314391 C1 20090122; CA 2559039 A1 20060615; CA 2559039 C 20131029; EP 1820283 A2 20070822; EP 1820283 A4 20100303; MX 2007000951 A 20070416

DOCDB simple family (application)  
**US 2005043245 W 20051130**; AU 2005314391 A 20051130; CA 2559039 A 20051130; EP 05826081 A 20051130; MX 2007000951 A 20051130