

(51) International Patent Classification:
H04R 25/00 (2006.01)(21) International Application Number:
PCT/EP2008/067323(22) International Filing Date:
11 December 2008 (11.12.2008)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **WIDEX**
A/S [DK/DK]; Nymoellevvej 6, DK-3540 Lyngby (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RUNG, Martin**
[DK/DK]; Humlebjerg 11, DK-2700 Bronshøj (DK). **JENSEN, Peter Nordland** [DK/DK]; Bryrupvej 10, DK-2770 Kastrup (DK). **OLSEN, Jørgen Mejner** [DK/DK]; Slotsgade 29, 1.tv., DK-3400 Hillerød (DK). **VAARBROE, Klaus** [DK/DK]; Lystøften 4, DK-2740 Skovlunde (DK). **BALLING, nge** [DK/DK]; Frederiksdalsvej 115, DK- 2830 Virum (DK). **NORDAHN, Morten Agerbaek** [DK/DK]; Vaengeledet 3, DK-2700 Bronshøj (DK).

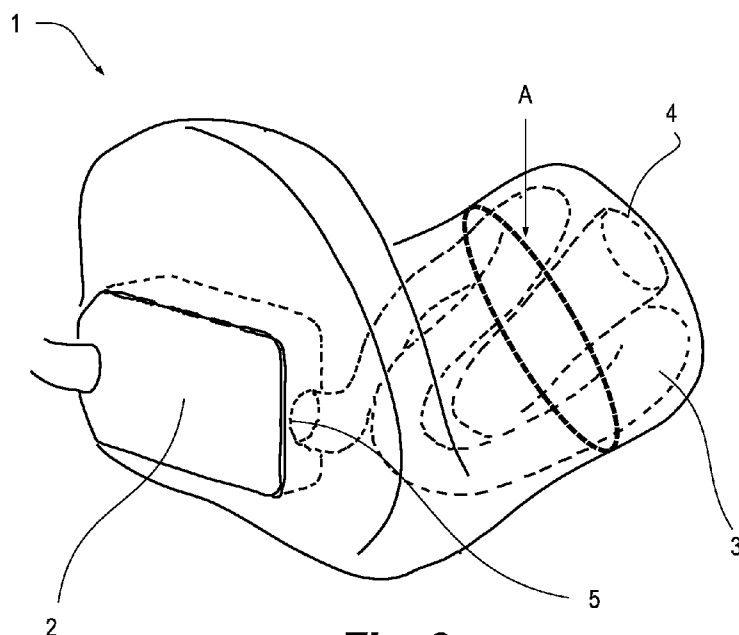
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: HEARING AID EARPIECE AND A METHOD OF MANUFACTURING A HEARING AID EARPIECE

**Fig. 2**

(57) Abstract: A hearing aid earpiece (1) is provided, that is custom fitted to the individual shape of the ear canal of a user and manufactured in a rapid prototyping process. The earpiece comprises a sound conduit (3) that is adapted for conveying an acoustic signal from an acoustic inlet port towards an acoustic outlet port and wherein the sound conduit is looped such that at least one geometrical plane, will intersect the sound conduit at least three times thereby providing a length of the sound conduit exceeding a largest outer dimension of the hearing aid earpiece. The invention also relates to a hearing aid comprising such a hearing aid earpiece and a method for manufacturing such an earpiece.