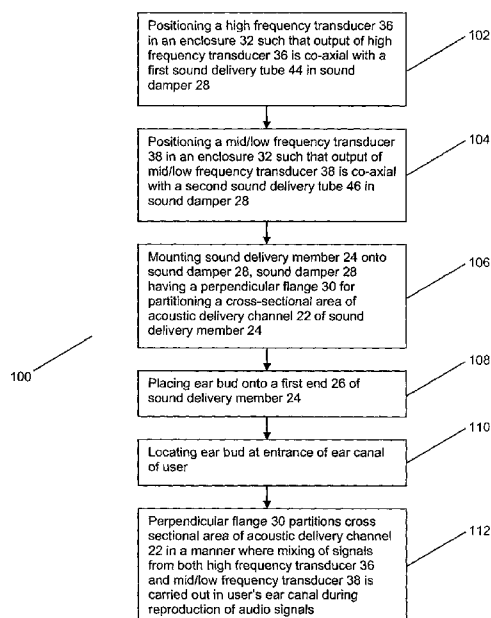




- (51) **International Patent Classification:**
H04R 1/10 (2006.01) *H04R 5/00* (2006.01)
H04R 3/00 (2006.01)
- (21) **International Application Number:**
PCT/SG2011/000410
- (22) **International Filing Date:**
21 November 2011 (21.11.2011)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
12/958,198 1 December 2010 (01.12.2010) US
- (71) **Applicant (for all designated States except US):** **CREATIVE TECHNOLOGY LTD** [SG/SG]; 31 International Business Park, Creative Resource, Singapore 609921 (SG).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **CHANG, Thean, Kuie, Christopher** [SG/SG]; Block 683c, Jurong West Street 64, #16-143, Singapore 643683 (SG). **PHUA, Hui, Ying, Alexa** [SG/SG]; Block 178, Yung Sheng Road, #04-129, Singapore 610178 (SG).
- (74) **Agent:** **KOK, Edmund;** Atmd Bird & Bird LLP, 2 Shenton Way, #18-01 SGX Centre 1, Singapore 068804 (SG).
- (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, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

- (54) **Title:** A METHOD FOR OPTIMIZING PERFORMANCE OF A MULTI-TRANSDUCER EARPIECE AND A MULTI-TRANSDUCER EARPIECE



- (57) **Abstract:** There is provided a method for optimizing performance of a multi-transducer earpiece, where the multi-transducer earpiece includes a perpendicular flange that partitions the cross sectional area of the acoustic delivery channel in a manner where mixing of signals from both the high frequency transducer and the mid/low frequency transducer is carried out in the ear canal of a user during reproduction of audio signals.

Figure 5



Published:

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