



- (51) **International Patent Classification:**
A61B 5/08 (2006.01) *G06F 19/00* (2011.01)
- (21) **International Application Number:**
PCT/SG2013/000345
- (22) **International Filing Date:**
14 August 2013 (14.08.2013)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/682,992 14 August 2012 (14.08.2012) US
- (71) **Applicant:** NANYANG TECHNOLOGICAL UNIVERSITY [SG/SG]; 50 Nanyang Avenue, Singapore 639798 (SG).
- (72) **Inventors:** SER, Wee; c/o Nanyang Innovation and Enterprise Office (NIEO), Innovation Centre Blk 1, Unit 216, 16 Nanyang Drive, Singapore 637722 (SG). YANG, Feng; c/o Nanyang Innovation and Enterprise Office (NIEO), Innovation Centre Blk 1, Unit 216, 16 Nanyang Drive,

Singapore 637722 (SG). YU, Jufeng; c/o Nanyang Innovation and Enterprise Office (NIEO), Innovation Centre Blk 1, Unit 216, 16 Nanyang Drive, Singapore 637722 (SG).

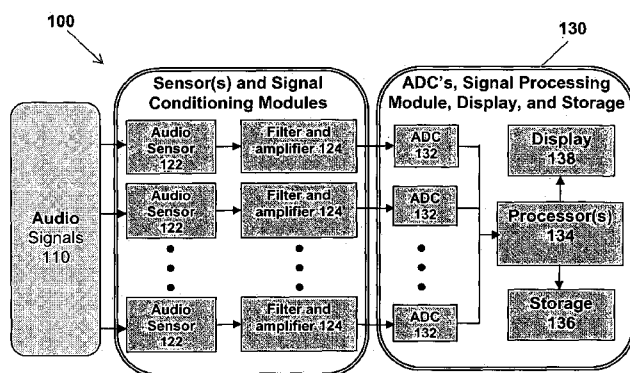
- (74) **Agent:** WATKIN, Timothy, Lawrence, Harvey; Marks & Clerk Singapore LLP, Tanjong Pagar, P O Box 636, Singapore 910816 (SG).

- (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, BN, 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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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.

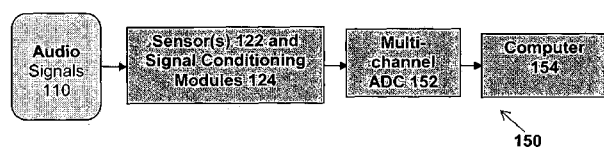
- (84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH,

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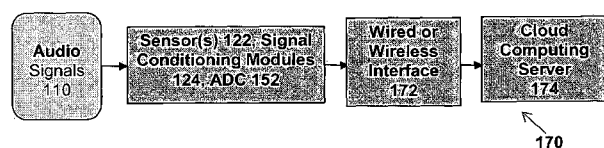
(54) **Title:** DEVICE, SYSTEM AND METHOD FOR DETECTION OF FLUID ACCUMULATION



(a) Portable device configuration



(b) Sensor-computer configuration



(c) Sensor-cloud computing configuration

- (57) **Abstract:** A method of detecting a level of fluid accumulation in an internal organ of a subject is proposed, as well as a system for carrying out the method. The method comprises: providing at least one classifier trained to distinguish between two or more levels of fluid accumulation; acquiring an audio signal (110) generated by said internal organ; and processing, using at least one processor (134), said audio signal (110) by: performing feature extraction to generate at least one feature vector from the audio signal; and assigning a fluid level from the two or more levels to the audio signal by passing the at least one feature vector to the at least one classifier.



GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

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