



(51) International Patent Classification:

A61B 5/0295 (2006.01) *G01N 21/25* (2006.01)
A61B 5/02 (2006.01)

(21) International Application Number:

PCT/SG2012/000006

(22) International Filing Date:

5 January 2012 (05.01.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13/010,705 20 January 2011 (20.01.2011) US

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(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,

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(54) Title: A DEVICE AND METHOD FOR REMOVAL OF AMBIENT NOISE SIGNAL FROM A PHOTOPLETHYSMOGRAPH

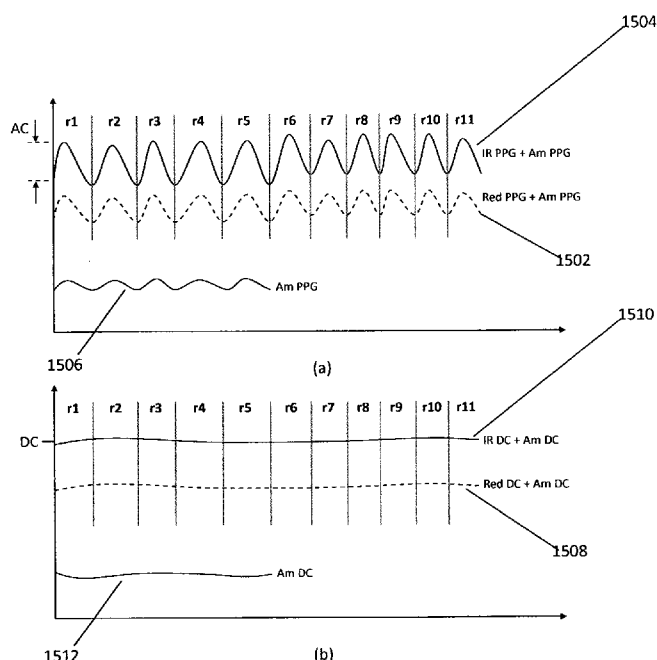


Figure 15

(57) Abstract: A device and method for removal of ambient noise signal from a photoplethysmographic measurement is provided. The method comprises obtaining a first signal waveform based on detecting light based on a first light illumination; obtaining a second signal waveform based on detecting light based on a second light illumination; tuning the first light and second light illumination such that the maximum amplitudes of the first and second signal waveforms are maximised and within a predetermined saturation range, such that ambient light interference for the first and second signal waveforms is reduced; obtaining a third signal waveform based on detecting ambient light; obtaining respective maximum and minimum values of the first and the second signal waveforms; and deriving signal values of the first and second signal waveforms with the removal of ambient noise by subtracting AC and DC average values of the third signal waveform from the first and second signals.



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).

Published:

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