

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 October 2023 (05.10.2023)



(10) International Publication Number
WO 2023/186425 A1

(51) International Patent Classification:

G16H 40/63 (2018.01) A61B 5/024 (2006.01)
G16H 40/67 (2018.01) G16H 10/60 (2018.01)
G16H 50/30 (2018.01) G16H 50/70 (2018.01)
A61B 5/00 (2006.01)

(21) International Application Number:

PCT/EP2023/054828

(22) International Filing Date:

27 February 2023 (27.02.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

22165124.3 29 March 2022 (29.03.2022) EP

(71) Applicant: HEARTKINETICS [BE/BE]; Rue Auguste Piccard 48, 6041 Gosselies (BE).

(72) Inventors: MIGEOTTE, Pierre-François; Rue de Laeken 34, 1000 Bruxelles (BE). GORLIER, Damien; Rue Hennepin 11/3, 7800 Ath (BE).

(74) Agent: CALYSTA NV; Lambroekstraat 5A, 1831 Diegem (BE).

(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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, 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, ME, 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).

Published:

- with international search report (Art. 21(3))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(54) Title: METHOD, SYSTEM AND COMPUTER PROGRAM FOR DETECTING A HEART HEALTH STATE

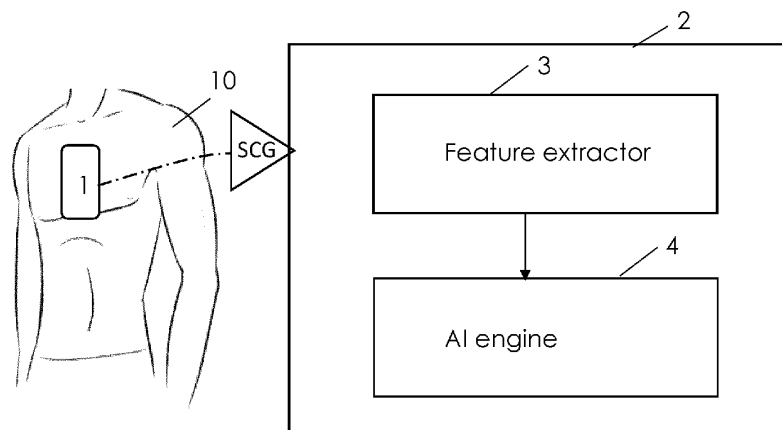


Fig. 1

(57) Abstract: Method for detecting a health state of a heart of a user comprising the following steps: receiving, in a processing means, a measurement signal from an IMU placed on a body of the user; determining, in the processing means, a plurality of features based on the measurement signal; and determining, in a machine learning engine of the processing means, based on the plurality of features the health state of the heart.

WO 2023/186425 A1