

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局

(43) 国际公布日
2023 年 9 月 28 日 (28.09.2023)



(10) 国际公布号
WO 2023/178957 A1

(51) 国际专利分类号:
A61B 5/00 (2006.01)

(21) 国际申请号: PCT/CN2022/120367

(22) 国际申请日: 2022 年 9 月 21 日 (21.09.2022)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
63/269,861 2022年3月24日 (24.03.2022) US

(71) 申请人: 全境智能有限公司 (PANOPTICAL LIMITED) [CN/CN]; 中国香港特别行政区新界白石角香港科学园科技大道西 19W 座 6楼659室, Hong Kong (CN)。

(72) 发明人: 陈经纬 (CHIN, Jing Wei); 中国香港特别行政区新界大埔白石角创新路 18 号海日湾 2 期 10 座 6 楼 L 室, Hong Kong (CN)。 陈子泰 (CHAN,

Tsz Tai); 中国香港特别行政区九龙观塘月华街 45 号多喜大厦 10 楼 A 室, Hong Kong (CN)。 苏哈托诺克里斯蒂安 (SUHARTONO, Kristian); 中国香港特别行政区九龙窝打老道 1R 号金堂大厦 8 楼 E 室, Hong Kong (CN)。

(74) 代理人: 深圳赞知知识产权代理事务所 (普通合伙) (SHENZHEN ZAN IP AGENCY); 中国广东省深圳市罗湖区南湖街道和平社区嘉宾路 4028 号太平洋商贸大厦 A、BB910, Guangdong 518000 (CN)。

(81) 指定国 (除另有指明, 要求每一种可提供的国家保护): 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, 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,

(54) Title: VITAL SIGN MONITORING METHOD, RELATED DEVICE, AND COMPUTER-READABLE STORAGE MEDIUM

(54) 发明名称: 生命体征监测方法、相关设备及计算机可读存储介质

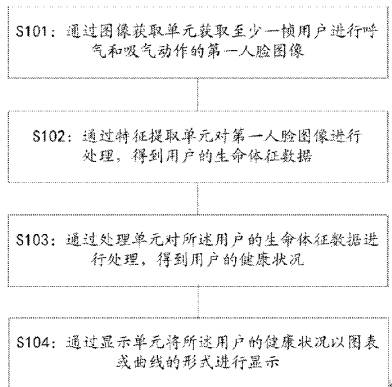


图 2

S101 Acquire, by means of the image acquisition unit, a first human face image of at least one frame of a user for expiration and inspiration actions
S102 Process the first human face image by means of the feature extraction unit to obtain vital sign data of the user
S103 Process the vital sign data of the user by means of the processing unit to obtain the health condition of the user
S104 Display, by means of a display unit, the health condition of the user in the form of a chart or a curve

(57) Abstract: Disclosed in the embodiments of the present application are a vital sign monitoring method, a related device, and a computer-readable storage medium. The method is applied to a vital sign monitoring device, the vital sign monitoring device comprises an image acquisition unit, a feature extraction unit, and a processing unit which are connected in sequence, and the method can comprise the following steps: acquiring, by means of the image acquisition unit, a first human face image of at least one frame of a user for expiration and inspiration actions; processing the first human face image by means of the feature extraction unit to obtain vital sign data of the user; and processing the vital sign data of the user by means of the processing unit to obtain the health condition of the user. By implementation of the present application, the vital signs of a user can be conveniently detected without a special monitoring device, so that the user can know his/her own health condition in real time, thereby avoiding the occurrence of sudden diseases to a certain extent.

[见续页]

WO 2023/178957 A1

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) 指定国 (除另有指明, 要求每一种可提供的地区
保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ,
NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚
(AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (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)。

本国际公布:

— 包括国际检索报告 (条约第21条(3))。

(57) 摘要: 本申请实施例公开了一种生命体征监测方法、相关设备及计算机可读存储介质, 该方法应用于生命体征监测设备, 生命体征监测设备包括依次相连的图像获取单元、特征提取单元和处理单元, 方法可以包括如下步骤: 通过图像获取单元获取至少一帧用户进行呼吸和吸气动作的第一人脸图像; 通过特征提取单元对第一人脸图像进行处理, 得到用户的生命体征数据; 通过处理单元对用户的生命体征数据进行处理, 得到用户的健康状况。实施本申请, 无需借助专用监测设备便可便捷地检测用户的生命体征, 有利于用户实时了解自身的健康状况, 在一定程度上可以避免突发疾病的发生。