

(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



(10) 国际公布号

WO 2021/022921 A1

(43) 国际公布日
2021 年 2 月 11 日 (11.02.2021)

(51) 国际专利分类号:

A61M 16/00 (2006.01)

A61M 16/10 (2006.01)

C25B 1/04 (2006.01)

C25B 1/10 (2006.01)

(74) 代理人: 北京天平专利商标代理有限公司(WANG & ASSOCIATES); 中国北京市丰台区榴乡路88号院2号楼3层304孙刚, Beijing 100079 (CN)。

(21) 国际申请号: PCT/CN2020/097612

(22) 国际申请日: 2020 年 6 月 23 日 (23.06.2020)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:

201910720008.8 2019年8月6日 (06.08.2019) CN

(72) 发明人: 及

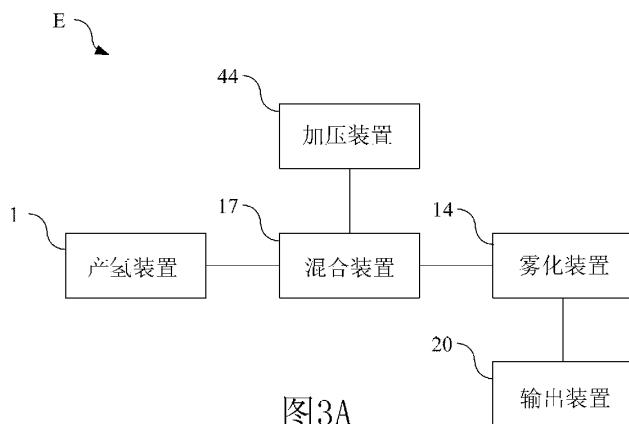
(71) 申请人: 林 信 涌 (LIN, Hsin-Yung) [CN/CN]; 中国台湾省桃园市龟山区山莺路 340 号, Taiwan 33341 (CN)。

(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, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, 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, 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, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM,

(54) Title: POSITIVE PRESSURE VENTILATION EQUIPMENT

(54) 发明名称: 正压呼吸设备



1 Hydrogen producing device
14 Atomizing device
17 Mixing device
20 Output device
44 Pressurizing device

图3A

(57) Abstract: Positive pressure ventilation equipment (E), which comprises a gas path, a hydrogen producing device (1), a pressurizing device (44), a mixing device (17), an atomizing device (14), and an output device (20). The hydrogen producing device (1), the pressurizing device (44), the mixing device (17), the atomizing device (14), and the output device (20) are all coupled to the gas path. The hydrogen producing device (1) is used for electrolyzing electrolytic water to produce a hydrogen-containing gas. The pressurizing device (44) can selectively accelerate an external gas to produce an accelerated gas. The mixing device (17) is used for mixing the hydrogen-containing gas with the accelerated gas to produce a positive pressure gas. The atomizing device (14) is used for selectively producing an atomized gas. The output device (20) is used for selectively outputting the hydrogen-containing gas, the positive pressure gas, the hydrogen-containing gas and the atomized gas, or the positive pressure gas and the atomized gas. The positive pressure ventilation equipment (E) can achieve matching of a breathing rate of a user. During inhalation, a ventilator produces positive pressure air which enters the lung of a patient via the gas path, so that the lung expands; during exhalation, there is no need to produce a positive pressure, and the tail end of a tube of the ventilator is open to the outside, so that the gas is voluntarily discharged.

[见续页]

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: 一种正压呼吸设备(E), 其包含气体通道、产氢装置(1)、加压装置(44)、混合装置(17)、雾化装置(14)以及输出装置(20)。产氢装置(1)、加压装置(44)、混合装置(17)、雾化装置(14)以及输出装置(20)皆与气体通道耦接。产氢装置(1)用以电解电解水以产生含氢气体。加压装置(44)可选择性地将外界气体加速以产生加速气体。混合装置(17)用以混合含氢气体与加速气体以产生正压气体。雾化装置(14)系用以选择性地产生雾化气体。输出装置(20)用以选择性地输出含氢气体、正压气体、含氢气体与雾化气体、或正压气体与雾化气体。正压呼吸设备(E)可配合使用者呼吸频率, 在吸气期间呼吸器产生正压的空气, 经气道进入病人肺内, 使肺脏膨胀; 呼气时可以不产生正压, 让呼吸器管路末端对外开放, 使气体自行排出。