

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
19 May 2023 (19.05.2023)



(10) International Publication Number
WO 2023/084492 A1

(51) International Patent Classification:

A61M 13/00 (2006.01) A61M 16/10 (2006.01)
A61M 16/00 (2006.01) A61M 16/16 (2006.01)
A61M 16/08 (2006.01)

(21) International Application Number:

PCT/IB2022/060952

(22) International Filing Date:

15 November 2022 (15.11.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/264,088 15 November 2021 (15.11.2021) US

(71) Applicant: FISHER PAYKEL HEALTHCARE LTD

[NZ/NZ]; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ).

(72) Inventors: SEEKUP, Peter Alan; 15 Maurice Paykel

Place, East Tamaki, Auckland, 2013 (NZ). STOKS, Elmo Benson; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ). AU, Eugena Ming-Yee; 15 Maurice Paykel

Place, East Tamaki, Auckland, 2013 (NZ). DEVERICK, Eric; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ). LIU, Po-Yen; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ). TENG, Ivan Chih-Fan; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ). BUDHIRAJA, Nimansha; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ). RAZALI, Naem Bin; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ). GEMMELL, Luke Morgan; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ). SUROWIEZ, Ree Isaac; 15 Maurice Paykel Place, East Tamaki, Auckland, 2013 (NZ).

(74) Agent: AJ PARK; Level 22, Aon Centre, 1 Willis Street, Wellington, 6011 (NZ).

(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,

(54) Title: MOISTURE DETECTION AND MANAGEMENT IN A GASES SUPPLY SYSTEM

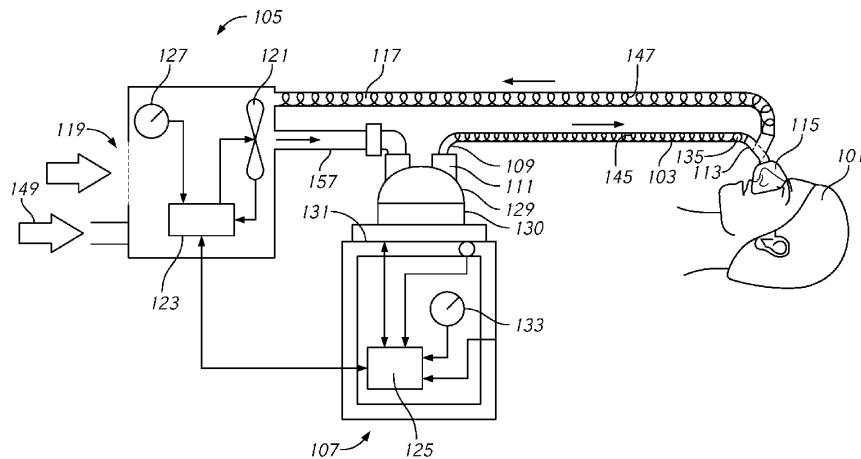


FIG. 1A

(57) Abstract: Moisture conditions in a conduit, particularly a gases supply system conduit for supplying respiratory or surgical gases, can be detected using an electrical property of the conduit. Moisture conditions can also be detected in another component of the gases supply system. The detected moisture conditions can be managed to reduce and/or remove excess moisture in the system.

[Continued on next page]

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, 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*