

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
16 December 2021 (16.12.2021)



(10) International Publication Number
WO 2021/250390 A1

(51) International Patent Classification:

F04C 25/02 (2006.01) F04D 29/58 (2006.01)
F04D 19/04 (2006.01) F04C 29/04 (2006.01)

(21) International Application Number:

PCT/GB2021/051414

(22) International Filing Date:

08 June 2021 (08.06.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2008675.7 09 June 2020 (09.06.2020) GB

(71) Applicant: **EDWARDS LIMITED** [GB/GB]; Innovation Drive, Burgess Hill, Sussex RH15 9TW (GB).

(72) Inventors: **KAILASAM, Sivabalan**; Edwards Limited, Innovation Drive, Burgess Hill, Sussex RH15 9TW (GB).
GRAY, Malcolm William; Edwards Limited, Innovation Drive, Burgess Hill, Sussex RH15 9TW (GB).

(74) Agent: **ARNOLD, Emily**; Edwards Limited, Innovation Drive, Burgess Hill, Sussex RH15 9TW (GB).

(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, 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, IT, 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) 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, 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, 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))

(54) Title: VACUUM SYSTEM APPARATUS AND METHOD

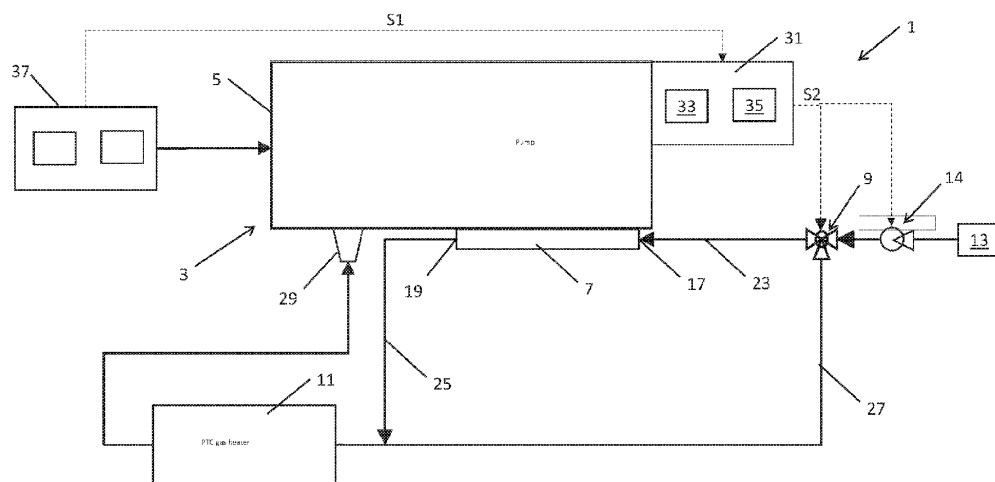


FIG. 1

(57) Abstract: Aspects of the present invention relate to a vacuum system (1). The vacuum system (1) includes a vacuum pump (3); and a heat exchanger (7) for receiving a heat transfer fluid. The heat transfer fluid comprising a gas. The heat exchanger (7) is thermally coupled to the vacuum pump (3) and is operable to absorb thermal energy from the vacuum pump (3). Aspects of the present invention also relate to a method of operating a vacuum system (1); and a controller (31) for controlling operation of a vacuum system (1).

WO 2021/250390 A1