

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
24 February 2022 (24.02.2022)



(10) International Publication Number
WO 2022/039840 A1

(51) International Patent Classification:

B01D 53/04 (2006.01) **B01D 53/86** (2006.01)
B01D 53/047 (2006.01)

(21) International Application Number:

PCT/US2021/039761

(22) International Filing Date:

30 June 2021 (30.06.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/067,539 19 August 2020 (19.08.2020) US
17/361,395 29 June 2021 (29.06.2021) US

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(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).

(54) Title: METHOD AND SYSTEM FOR PRE-PURIFICATION OF A FEED GAS STREAM

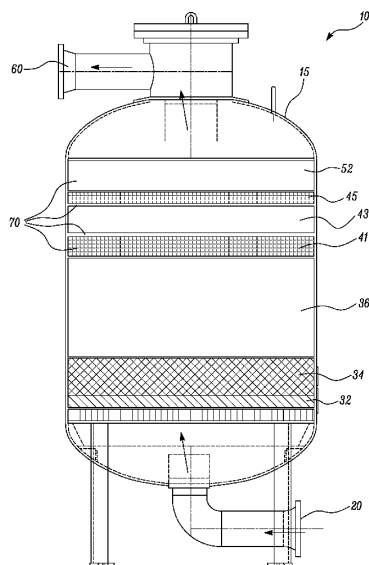


FIG. 1

(57) Abstract: A system and method of pre-purification of a feed gas stream is provided that is particularly suitable for pre-purification of a feed air stream in cryogenic air separation unit. The disclosed pre-purification systems and methods are configured to remove substantially all of the hydrogen, carbon monoxide, water, and carbon dioxide impurities from a feed air stream and is particularly suitable for use in a high purity or ultra-high purity nitrogen plant. The pre-purification systems and methods preferably employ two or more separate layers of hopcalite catalyst with the successive layers of the hopcalite separated by a zeolite adsorbent layer that removes water and carbon dioxide produced in the hopcalite layers.

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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*