



**(43) International Publication Date**  
**26 May 2016 (26.05.2016)**

**(51) International Patent Classification:**

**B01D 53/00** (2006.01)      **C10G 21/00** (2006.01)  
**C10L 3/06** (2006.01)      **G01N 30/88** (2006.01)

**(21) International Application Number:**

PCT/US2015/057327

**(22) International Filing Date:**

26 October 2015 (26.10.2015)

**(25) Filing Language:**

English

**(26) Publication Language:**

English

**(30) Priority Data:**

|            |                               |    |
|------------|-------------------------------|----|
| 14/548,432 | 20 November 2014 (20.11.2014) | US |
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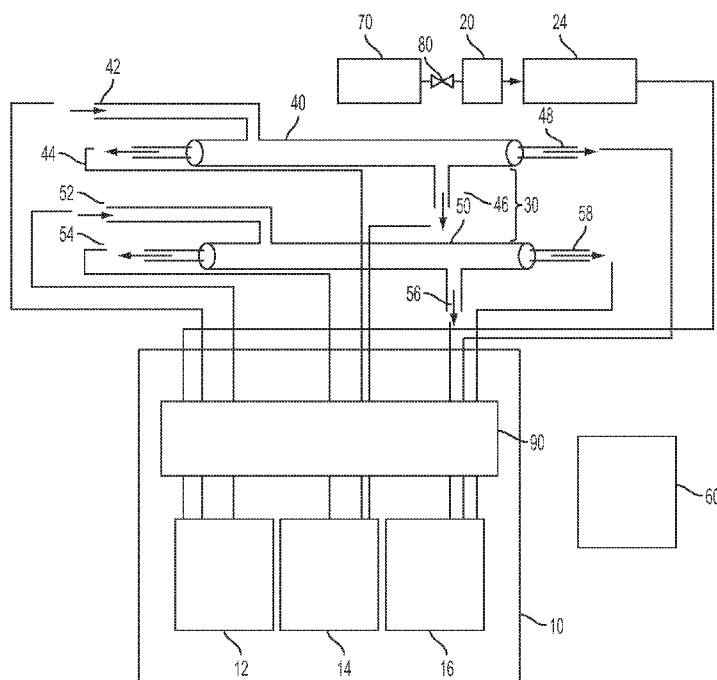
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**(81) Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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**(54) Title:** INTEGRATED ANALYZER FOR PROCESS MONITORING DURING PROCESSING AND UPGRADING OF NATURAL GAS



**(57) Abstract:** A gas chromatographic method for analyzing natural gas and a natural gas upgrading system using the gas chromatographic method for analyzing natural gas. The method includes transporting the natural gas through a chiller, transporting the natural gas from the chiller to at least two gas upgrading membranes, and operating a gas chromatographic system having at least one upstream gas chromatograph and at least two downstream gas chromatographs. The at least one upstream gas chromatograph, the first downstream gas chromatograph, and the second downstream gas chromatograph all operate simultaneously and utilize the same heating oven to heat samples of natural gas.

FIGURE 1



(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).

**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))*