



(51) International Patent Classification:

C01C 1/02 (2006.01) *C01B 3/02* (2006.01)
C01B 21/04 (2006.01) *C01B 3/56* (2006.01)

(21) International Application Number:

PCT/PL2013/000075

(22) International Filing Date:

7 June 2013 (07.06.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PL399466 8 June 2012 (08.06.2012) PL

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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, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, 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, 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.

(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, 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))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: METHOD FOR PURIFICATION OF AMMONIA, MIXTURES OF NITROGEN AND HYDROGEN, OR NITROGEN, HYDROGEN AND AMMONIA

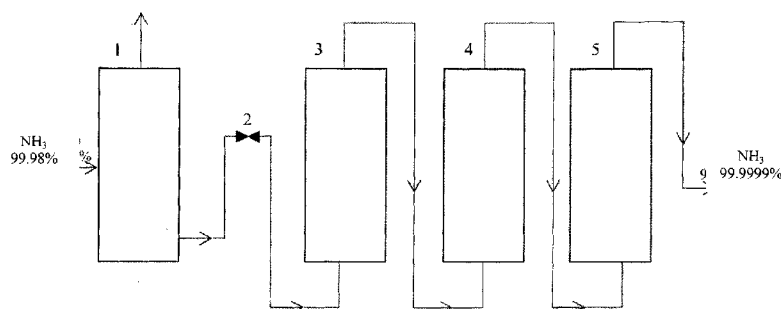


Fig. 1. Block diagram of the system according to Example 1.

(57) Abstract: Method for purification of ammonia or mixtures of nitrogen and hydrogen, or nitrogen, hydrogen and ammonia, according to which: a) ammonia or a mixture of gases under pressure of from 0.1 to 25 MPa is passed through a column packed with aluminium oxide with a large specific surface area; b) the ammonia or mixture of gases is then passed through a column packed with CaO, NaOH, KOH or an NaOH/KOH melt, separately or in a mixture, at 20 to 70°C and under pressure of from 0.1 to 25 MPa; c) next, the ammonia or mixture of gases is passed through a column packed with activated carbon having a specific area of 100÷3000 m²/g with sodium, potassium, caesium, magnesium, calcium, strontium, barium or cerium nitrates(V) or nitrates(III) deposited on its surface, separately or in a mixture; the aforementioned steps being realised in a serial process at a gas stream flow rate in the range of 100 dm³/h to 1000 m³/h.