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

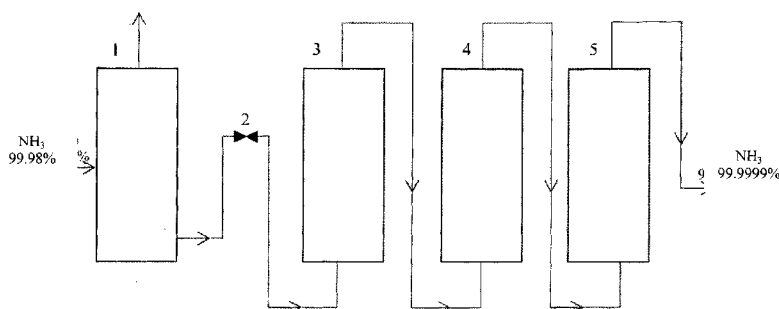


Fig. 1. Block diagram of the system according to Example 1.

(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.