

Title (en)
Process and installation for producing ultrapure nitrogen by air distillation.

Title (de)
Verfahren und Anlage zur Herstellung von ultrareinem Stickstoff durch Luftdestillation.

Title (fr)
Procédé et installation de production d'azote ultra-pur par distillation d'air.

Publication
EP 0611936 A1 19940824 (FR)

Application
EP 94400257 A 19940207

Priority
FR 9301403 A 19930209

Abstract (en)
The installation is of the double column type (5), comprising a first column (6) for nitrogen/oxygen separation, fed with the air to be treated, and a second column (7) for nitrogen/hydrogen separation, the head of which is coupled to the chamber of the first column via an evaporator/condenser (10), and which includes a chamber evaporator (11), and a nitrogen cooling circuit (12) whose high-pressure part feeds the chamber evaporator (11) of the second column (7), then this second column itself. The installation furthermore comprises means (10; 10A) for condensing the nitrogen in the high-pressure circuit by vapourising liquid in the tank of the first column (6). <IMAGE>

Abstract (fr)
L'installation est du type à double colonne (5) comprenant une première colonne (6) de séparation azote/oxygène alimentée par l'air à traiter, et une seconde colonne (7) de séparation azote/hydrogène dont la tête est couplée à la cuve de la première colonne par un vaporiseur-condenseur (10) et qui comporte un vaporiseur de cuve (11), et un cycle frigorifique à azote (12) dont la partie haute pression alimente le vaporiseur de cuve (11) de la seconde colonne (7) puis cette seconde colonne elle-même. L'installation comprend en outre des moyens (10; 10A) pour condenser de l'azote de cycle haute pression par vaporisation de liquide de cuve de la première colonne (6). <IMAGE>

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Citation (search report)
• [A] US 5123947 A 19920623 - AGRAWAL RAKESH [US]
• [A] EP 0384688 A2 19900829 - BOC GROUP PLC [GB]

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