

Title (en)

Process and apparatus for the production of high purity nitrogen

Title (de)

Verfahren und Vorrichtung zur Gewinnung von hochreinem Stickstoff

Title (fr)

Procédé et dispositif pour la production d'azote à haute pureté

Publication

EP 0834711 A3 19980715 (DE)

Application

EP 97117183 A 19971002

Priority

DE 19640711 A 19961002

Abstract (en)

[origin: EP0834711A2] Production of extra-pure nitrogen is carried out in an air separation plant having a high pressure column (2) and a low pressure column (3) connected through a heat exchanger (4). A nitrogen-rich fraction (9) is drawn off from the high pressure column (2) and is passed into the pure nitrogen column (10) where a portion is condensed in a heat exchanger (11). A fraction containing the more volatile components is withdrawn (12). The extra-pure nitrogen is withdrawn as a liquid (13) at a place below the entry (9) of the nitrogen-rich fraction from the high pressure column (2) where at least one theoretical, or practical, base has been formed. Also claimed is the apparatus required for the above process.

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Citation (search report)

- [X] US 5123947 A 19920623 - AGRAWAL RAKESH [US]
- [A] US 3079759 A 19630305 - SCHILLING CLARENCE J
- [A] EP 0299364 A2 19890118 - LINDE AG [DE]

Cited by

EP1001236A3; US6276172B1; US8661847B2

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