

Title (en)

Process for the production of high pressure nitrogen and oxygen

Title (de)

Verfahren zur Herstellung von Hochdruck-Stickstoff und Sauerstoff

Title (fr)

Procédé de production d'azote sous haute pression et d'oxygène

Publication

EP 0562893 B2 20001220 (FR)

Application

EP 93400522 A 19930302

Priority

FR 9203501 A 19920324

Abstract (en)

[origin: EP0562893A1] According to this process, after the nitrogen originating from the low pressure column (11) is heated, it is compressed to the high pressure by means of a single nitrogen compressor (7) and the low-pressure column (11) is operated at a pressure of the order of P_N / ρ_N , where P_N denotes the high pressure of nitrogen and ρ_N the compression ratio of the said nitrogen compressor. Application to the simultaneous production of, on the one hand, nitrogen of high purity at a pressure of between 50 and 60 bars and, on the other hand, oxygen at 65 bars, to feed a unit for producing ammonia. <IMAGE>

IPC 1-7

F25J 3/04

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: EP US)

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Citation (opposition)

Opponent :

- EP 0384483 A2 19900829 - LINDE AG [DE]
- SU 739316 A1 19800605 - BELYAKOV VIKTOR P [SU], et al
- Prospectus de l'entreprise Atlas Copco: "Process-Engineered Centrifugal Compressors", 1991, pages 1 à 24
- Rohde, W., "Plants with Molecular Sieve Absorbers, Comparison with other Processes and Operational Advantages", LINDE-Symposium "Air Separation Plants", juin 1986, pages 1 à 20
- Springmann, H., "Die Gewinnung von Hochdruck-Sauerstoff", LINDE-Berichte aus Wissenschaft und Technik, 46/1979

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CN106489059A; EP0982554A1; EP0834712A3; EP1120616A3; EP3059536A1; CN108207113A; CN106662394A; RU2691210C2; US6247333B1; US6871513B2; WO2016131545A1; WO03016676A1; US7100692B2; WO2016005031A1

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