Title (en)

Process and apparatus for recovering oxygen and nitrogen at superatmospheric pressure

Title (de)

Verfahren und Vorrichtung zur Gewinnung von Sauerstoff und Stickstoff unter überatmosphärischem Druck

Title (fr)

Procédé et dispositif pour la récupération d'oxygène et d'azote à pression superatmosphérique

Publication

EP 0775881 A3 19970820 (DE)

Application

EP 96118281 A 19961114

Priority

DE 19543953 A 19951125

Abstract (en)

[origin: DE19543953C1] An insert air conduit (1,3) introduces compressed and cleaned insert air into the pressure column (4). A first fluid fraction conduit (5) connects the lower area of the pressure column with the low pressure column (7). A second fluid fraction conduit (8) connects the upper or central area of the pressure column with the low pressure column. A condenser-evaporator (12) has its evaporation chamber connected via a third fluid fraction conduit (17) with the lower area of the low pressure column. Its condensation chamber (10,11) is connected to the upper area of the pressure column. A vapour conduit (22,24,26,27) is provided between the evaporation chamber of the condenser-evaporator and the pressure column. The distillation process efficiently separates oxygen and nitrogen.

IPC 1-7

F25J 3/04

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: EP KR US)

F25J 3/04084 (2013.01 - KR); **F25J 3/0409** (2013.01 - EP KR US); **F25J 3/04103** (2013.01 - EP KR US); **F25J 3/04212** (2013.01 - EP KR US); **F25J 3/04321** (2013.01 - EP KR US); **F25J 3/04363** (2013.01 - EP KR US); **F25J 3/04424** (2013.01 - EP KR US); **F25J 3/04678** (2013.01 - EP KR US); **F25J 3/04878** (2013.01 - EP KR US); **F25J 3/04915** (2013.01 - EP KR US); F25J 2235/50 (2013.01 - EP KR US)

Citation (search report)

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- [A] US 5456083 A 19951010 - HOGG NEIL [US], et al
- [A] DE 2402246 A1 19750731 - LINDE AG

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EP1045154A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

DE 19543953 C1 19961219; BR 9605678 A 19980818; CA 2191161 A1 19970526; DE 59605238 D1 20000621; EP 0775881 A2 19970528; EP 0775881 A3 19970820; EP 0775881 B1 20000517; JP H09170874 A 19970630; KR 970028406 A 19970624; MX 9605785 A 19980531; TW 332856 B 19980601; US 5749246 A 19980512; ZA 969797 B 19970610

DOCDB simple family (application)

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