

Title (en)

Cryogenic triple column air separation system with argon recovery

Title (de)

Drei-Säulen-System zur Tieftemperaturzerlegung mit Argongewinnung

Title (fr)

Système de séparation d'air cryogénique à trois colonnes avec production d'argon

Publication

EP 1357342 B1 20061102 (DE)

Application

EP 02011458 A 20020524

Priority

DE 10217091 A 20020417

Abstract (en)

[origin: EP1357342A1] In a three-stage cryogenic air rectification process for the abstraction of air, the first argon-enriched flow (59, 61) is especially taken from a medium-pressure column (10). A cryogenic gas rectification system has three columns for the extraction of argon from air. The assembly has high (9), medium (10) and low-pressure (11) columns and is linked to a raw argon column (63). The system has an inlet for ambient air which is rectified to separate oxygen and nitrogen. Oxygen or nitrogen (52, 54, 58) is extracted from the low-pressure column. A first flow of argon-enriched gas (59, 61) is abstracted from the nitrogen/oxygen rectification system and surrendered to the raw argon column (63). An argon-rich fraction (75) is drawn from the column (63) and has an argon content greater than that of the first argon-enriched flow (59, 61). The first argon-enriched flow (59, 61) is taken from the medium-pressure column (10).

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