

Title (en)

PROCESS AND APPARATUS FOR PRODUCING ARGON BY CRYOGENIC AIR SEPARATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON ARGON DURCH TIEFTEMPERATURZERLEGUNG VON LUFT

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR LA PRODUCTION D'ARGON PAR SÉPARATION CRYOGÉNIQUE DE L'AIR

Publication

EP 4390281 A1 20240626 (EN)

Application

EP 22020618 A 20221220

Priority

EP 22020618 A 20221220

Abstract (en)

The process for producing an argon-enriched fraction by cryogenic air separation comprises- introducing feed air into a distillation system for oxygen-nitrogen separation comprising a low-pressure column,- withdrawing an argon-containing fraction from the low-pressure column and introducing it into a crude argon column having a crude argon top condenser being indirectly cooled by a cryogenic working fluid,- withdrawing an argon-enriched fraction from an upper section of the crude argon column,- measuring the oxygen content in the argon-containing fraction,characterized in that- measuring the nitrogen content in the argon-containing fraction,- predicting the nitrogen content in the crude argon condenser on the basis of the measured nitrogen content and- controlling the operation of the crude argon column depending on such corrected estimated argon concentration depending on such predicted nitrogen content in the crude argon condenser.A respective apparatus is claimed as well.

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: EP)

F25J 3/0409 (2013.01); **F25J 3/04224** (2013.01); **F25J 3/04357** (2013.01); **F25J 3/04412** (2013.01); **F25J 3/04678** (2013.01); **F25J 3/04727** (2013.01); **F25J 3/048** (2013.01); **F25J 2280/02** (2013.01)

Citation (search report)

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- [A] US 5522224 A 19960604 - CANNEY WILLIAM M [US]
- [A] US 2021310730 A1 20211007 - TRUEBA ANTONIO [FR], et al
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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

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