Title (en)

METHOD AND APPLIANCE FOR SEPARATING AIR BY CRYOGENIC DISTILLATION

Title (de)

VERFAHREN UND ANWENDUNG ZUR LUFTTRENNUNG DURCH KRYOGENE DESTILLATION

Title (fr)

PROCEDE ET APPAREIL DE SEPARATION D'AIR PAR DISTILLATION CRYOGENIQUE

Publication

EP 2531794 B1 20140402 (FR)

Application

EP 11707452 A 20110203

Priority

- FR 1050775 A 20100204
- FR 2011050212 W 20110203

Abstract (en)

[origin: WO2011095739A1] In a method for separating air in a column (11, 13) system, by cryogenic distillation, compressed, purified and cooled air is separated in the column system in order to form an oxygen-enriched flow and a nitrogen-enriched flow. At least one column (13) of the column system contains a vapouriser-condenser (15) for ensuring the vapourisation of a liquid enriched in oxygen in relation to the air by means of heat exchange with a calorigenic fluid (37), the calorigenic fluid having been compressed upstream of the vapouriser-condenser in a compressor (61) having a cryogenic inlet temperature, the calorigenic fluid being at least partially condensed in the vapouriser-condenser, and a cryogenic liquid (45) is added to the calorigenic fluid upstream of the vapouriser-condenser.

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: EP US)

F25J 3/0406 (2013.01 - EP US); **F25J 3/0409** (2013.01 - EP US); **F25J 3/04206** (2013.01 - EP US); **F25J 3/04309** (2013.01 - EP US); **F25J 3/04351** (2013.01 - EP US); **F25J 3/04412** (2013.01 - US); **F25J 3/04418** (2013.01 - EP US); **F25J 3/0486** (2013.01 - EP US); F25J 2200/06 (2013.01 - US); F25J 2200/40 (2013.01 - US); F25J 2200/54 (2013.01 - EP US); F25J 2245/42 (2013.01 - EP US); F25J 2250/04 (2013.01 - EP US); F25J 2250/40 (2013.01 - EP US); F25J 2250/50 (2013.01 - EP US)

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 MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

FR 2955926 A1 20110805; **FR 2955926 B1 20120302**; EP 2531794 A1 20121212; EP 2531794 B1 20140402; ES 2476285 T3 20140714; US 2012297823 A1 20121129; US 9140491 B2 20150922; WO 2011095739 A1 20110811

DOCDB simple family (application)

FR 1050775 A 20100204; EP 11707452 A 20110203; ES 11707452 T 20110203; FR 2011050212 W 20110203; US 201113576230 A 20110203