

Title (en)

METHOD FOR PRODUCING ONE OR MORE AIR PRODUCTS AND AIR SEPARATION SYSTEM

Title (de)

VERFAHREN ZUR GEWINNUNG EINES ODER MEHRERER LUFTPRODUKTE UND LUFTZERLEGUNGSANLAGE

Title (fr)

PROCÉDÉ DE PRODUCTION D'UN OU DE PLUSIEURS PRODUITS PNEUMATIQUES ET INSTALLATION DE SÉPARATION D'AIR

Publication

EP 3410050 B1 20190501 (DE)

Application

EP 18020214 A 20180517

Priority

EP 17020238 A 20170602

Abstract (en)

[origin: US2018347900A1] The invention proposes a process and an air separation plant comprising a rectification column system comprising a high-pressure column, a low-pressure column, a main heat exchanger, and a main air compressor. The total air supplied to the rectification column system is compressed in the main air compressor to a first pressure level. The high-pressure column is operated at a second pressure level, at least 3 bar below the first pressure level. A gaseous, nitrogen-rich fluid is removed from the high-pressure column and warmed up in the gaseous state without prior liquefaction. A first partial quantity of the gaseous, nitrogen-rich fluid is warmed to a first temperature level of -150 to -100° C., supplied at this first temperature level to a booster and compressed further to a third pressure level. The first partial quantity is then warmed to a second temperature level and discharged from the air separation plant.

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: CN EP RU US)

F25J 3/04024 (2013.01 - RU US); **F25J 3/04054** (2013.01 - CN RU); **F25J 3/0406** (2013.01 - EP US); **F25J 3/04084** (2013.01 - EP US);
F25J 3/0409 (2013.01 - EP US); **F25J 3/04109** (2013.01 - CN US); **F25J 3/04175** (2013.01 - EP RU US); **F25J 3/04296** (2013.01 - EP RU US);
F25J 3/04351 (2013.01 - EP RU US); **F25J 3/04381** (2013.01 - EP US); **F25J 3/04393** (2013.01 - EP US); **F25J 3/04412** (2013.01 - EP RU US);
F25J 3/04666 (2013.01 - US); **F25J 3/04678** (2013.01 - EP US); **F25J 3/04727** (2013.01 - EP US); **F25J 3/04915** (2013.01 - US);
F25J 2200/92 (2013.01 - EP US); **F25J 2215/54** (2013.01 - EP US); **F25J 2230/20** (2013.01 - US); **F25J 2240/04** (2013.01 - US);
F25J 2240/46 (2013.01 - EP US)

Cited by

WO2019214847A1

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)

EP 3410050 A1 20181205; EP 3410050 B1 20190501; CN 109059421 A 20181221; CN 109059421 B 20220531; HU E045459 T2 20191230;
PL 3410050 T3 20191031; RU 2018120350 A 20191203; RU 2018120350 A3 20211108; RU 2768445 C2 20220324;
TR 201910679 T4 20190821; TW 201903342 A 20190116; TW I770186 B 20220711; US 11098950 B2 20210824; US 2018347900 A1 20181206

DOCDB simple family (application)

EP 18020214 A 20180517; CN 201810557870 A 20180601; HU E18020214 A 20180517; PL 18020214 T 20180517;
RU 2018120350 A 20180601; TR 201910679 T 20180517; TW 107118919 A 20180601; US 201815995742 A 20180601