

Title (en)
METHOD AND SYSTEM FOR PROVIDING ONE OR MORE OXYGEN-RICH, GASEOUS AIR PRODUCTS

Title (de)
VERFAHREN UND ANLAGE ZUR BEREITSTELLUNG EINES ODER MEHRERER SAUERSTOFFREICHER, GASFÖRMIGER LUFTPRODUKTE

Title (fr)
PROCÉDÉ ET INSTALLATION POUR FOURNIR UN OU PLUSIEURS PRODUITS PRÉSENTS DANS L'AIR, GAZEUX ET À TENEUR ÉLEVÉE EN OXYGÈNE

Publication
EP 3924677 A1 20211222 (DE)

Application
EP 20703140 A 20200130

Priority

- EP 19020067 A 20190213
- EP 19020068 A 20190213
- EP 2020025039 W 20200130

Abstract (en)
[origin: WO2020164799A1] The invention relates to a high-pressure (HAP) air separation plant (100-300). In order to form a first, unliquefied process stream and a second, liquefied process stream which are separately decompressed to a pressure level of the high-pressure column (111) and fed into said column, gaseous and liquid portions of air are used, said air being provided at a first pressure level and a first temperature level and being successively cooled to a second temperature level, compressed to a second pressure level, cooled to a third temperature level, and subjected to a phase separation process. The first process stream is supplied to the decompression process at the second pressure level and the third temperature level, and the second pressure level and the third temperature level are selected so as to form a liquid portion of 5% to 15%, based on the entire first process stream, during the decompression of the first process stream to the operating pressure level of the high-pressure column (111). Without being compressed further, further air is cooled down, decompressed using turbines, and fed into the rectification column system (110). Only process streams provided using the rectification column system (110) are used for cooling. The invention also relates to an air separation plant (100-300).

IPC 8 full level
F25J 3/04 (2006.01)

CPC (source: EP)
F25J 3/04018 (2013.01); **F25J 3/04054** (2013.01); **F25J 3/0409** (2013.01); **F25J 3/04096** (2013.01); **F25J 3/04175** (2013.01); **F25J 3/04296** (2013.01); **F25J 3/04303** (2013.01); **F25J 3/04375** (2013.01); **F25J 3/04381** (2013.01); **F25J 3/04393** (2013.01); **F25J 3/04412** (2013.01); **F25J 3/04678** (2013.01); **F25J 3/04727** (2013.01); **F25J 3/04957** (2013.01); **F25J 2205/04** (2013.01); **F25J 2215/54** (2013.01); **F25J 2230/24** (2013.01); **F25J 2230/40** (2013.01); **F25J 2290/60** (2013.01)

Citation (search report)
See references of WO 2020164799A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3696486 A1 20200819; EP 3924677 A1 20211222; WO 2020164799 A1 20200820

DOCDB simple family (application)
EP 19020068 A 20190213; EP 2020025039 W 20200130; EP 20703140 A 20200130