Title (en)
METHOD FOR SEPARATING AIR BY MEANS OF CRYOGENIC DISTILLATION

Title (de)
VERFAHREN ZUR TRENNUNG VON LUFT DURCH KRYOGENE DESTILLATION

Title (fr)
PROCEDE DE SEPARATION D'AIR PAR DISTILLATION CRYOGENIQUE

Publication
EP 2712419 B1 20170809 (FR)

Application
EP 12714821 A 20120321

Priority
• FR 1152733 A 20110331
• FR 2012050587 W 20120321

Abstract (en)
[origin: WO2012131231A2] In an air-distillation method, purified air is cooled in an exchange line (8) and then sent to a distillation column (12) of a system of columns, and oxygen- and nitrogen-rich fluids are extracted from a column (14) of the system of columns only during the repressurization phase. A purified airflow, constituting between 3% and 20% of the air compressed in the compressor, is used to at least partially pressurize the adsorber completing the regeneration phase thereof, and the airflow compressed in the compressor during the adsorption phase is substantially equal to the airflow compressed in the compressor during the pressurization of the adsorber. A portion of the purified air is sent to a turbine (27) where it is decompressed and then sent into the atmosphere so as to ensure that it is kept at least partially cold during the entire cycle, and the amount of decompressed airflow sent into the air during the pressurization of an adsorber is less than the amount sent into the air during the adsorption phase of the same adsorber.

IPC 8 full level
F25J 3/04 (2006.01)

CPC (source: EP US)
F25J 3/04 (2013.01 - US); **F25J 3/04054** (2013.01 - EP US); **F25J 3/0409** (2013.01 - EP US); **F25J 3/04175** (2013.01 - EP US); **F25J 3/04181** (2013.01 - EP US); **F25J 3/0429** (2013.01 - EP US); **F25J 3/04296** (2013.01 - EP US); **F25J 3/04393** (2013.01 - EP US); **F25J 3/04412** (2013.01 - EP US); **F25J 3/04478** (2013.01 - EP US); F25J 2205/72 (2013.01 - EP US); F25J 2215/40 (2013.01 - EP)

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)
WO 2012131231 A2 20121004; **WO 2012131231 A3 20150820**; CN 104246401 A 20141224; CN 104246401 B 20160203; EP 2712419 A2 20140402; EP 2712419 B1 20170809; FR 2973486 A1 20121005; FR 2973486 B1 20130503; US 2014013798 A1 20140116

DOCDB simple family (application)
FR 2012050587 W 20120321; CN 201280016801 A 20120321; EP 12714821 A 20120321; FR 1152733 A 20110331; US 201214004264 A 20120321