

Title (en)

Method and device for generating pressurised oxygen by cryogenic decomposition of air

Title (de)

Verfahren und Vorrichtung zur Erzeugung von Drucksauerstoff durch Tieftemperaturzerlegung von Luft

Title (fr)

Procédé et dispositif destinés à la production d'oxygène sous pression par décomposition à basse température de l'air

Publication

EP 2600090 B1 20140716 (DE)

Application

EP 12007828 A 20121120

Priority

- EP 11009537 A 20111201
- EP 12007828 A 20121120

Abstract (en)

[origin: EP2600090A1] The method involves branching a recycle stream (57) from a liquefied partial flow line (14), where the recycle stream is relaxed in a throttle valve (58) and is warmed in a main heat exchanger (13). The warmed recycle stream (59) is supplied to the partial flow (7) upstream of a booster (10). The supplied air (1) is compressed to an air pressure in a main air compressor (3) and an air booster. The air is compressed to the pressure that is equal to 4 bar higher than the operating pressure of a high pressure column (18) of a distillation column system for the nitrogen-oxygen separation. An independent claim is included for a device for producing pressurized oxygen by the low-temperature fractionation of air.

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: EP US)

F25J 3/04018 (2013.01 - US); **F25J 3/04054** (2013.01 - EP US); **F25J 3/04084** (2013.01 - EP US); **F25J 3/0409** (2013.01 - EP US); **F25J 3/04096** (2013.01 - EP US); **F25J 3/04175** (2013.01 - EP US); **F25J 3/042** (2013.01 - EP); **F25J 3/04296** (2013.01 - EP US); **F25J 3/04339** (2013.01 - EP US); **F25J 3/04393** (2013.01 - EP US); **F25J 3/04412** (2013.01 - EP US); **F25J 3/04678** (2013.01 - EP US); **F25J 3/04703** (2013.01 - EP US); **F25J 3/04727** (2013.01 - EP US); **F25J 2235/58** (2013.01 - EP); **F25J 2240/04** (2013.01 - EP US); **F25J 2245/50** (2013.01 - EP US); **F25J 2270/02** (2013.01 - EP US)

Cited by

RU2761562C2; CN106489059A; CN106662394A; WO2018215716A1; WO2016005031A1; US10794630B2; US10866024B2

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