

Title (en)

METHOD AND DEVICE FOR SEPARATING A GAS MIXTURE BY CRYOGENIC DISTILLATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR TRENNUNG EINER GASMISCHUNG DURCH KRYOGENE DESTILLATION

Title (fr)

PROCEDE ET APPAREIL DE SEPARATION D'UN MELANGE GAZEUX PAR DISTILLATION CRYOGENIQUE

Publication

**EP 2104825 A2 20090930 (FR)**

Application

**EP 07871966 A 20071218**

Priority

- FR 2007052552 W 20071218
- FR 0655924 A 20061222

Abstract (en)

[origin: FR2910604A1] The apparatus has a purifying apparatus (A) for purifying a gas mixture (1) in a system, which is formed by a set of adsorbent bottles, low pressure column systems (LP), medium pressure column system (MP) and argon column system (AR). Valves (v19, v29) send a cryogen liquid to a storage container (15), and valves (2, V2) send a vaporized liquid of the storage container to the column system (MP). The storage container has a vaporizer (R2) for vaporizing the liquid. A gas transporting unit sends a calorigenic gas to the vaporizer, and a dump valve (3) draws out liquid from the storage container. An independent claim is also included for a cryogenic method for distilling a gas mixture.

IPC 8 full level

**F25J 3/04** (2006.01); **F25J 3/02** (2006.01)

CPC (source: EP US)

**F25J 3/0223** (2013.01 - EP US); **F25J 3/0252** (2013.01 - EP US); **F25J 3/0261** (2013.01 - EP US); **F25J 3/04024** (2013.01 - EP US); **F25J 3/0409** (2013.01 - EP US); **F25J 3/04163** (2013.01 - EP US); **F25J 3/04169** (2013.01 - EP US); **F25J 3/04181** (2013.01 - EP US); **F25J 3/04187** (2013.01 - EP US); **F25J 3/04296** (2013.01 - EP US); **F25J 3/04412** (2013.01 - EP US); **F25J 3/04478** (2013.01 - EP US); **F25J 3/0449** (2013.01 - EP US); **F25J 3/04496** (2013.01 - EP US); **F25J 3/04654** (2013.01 - EP US); **F25J 3/04666** (2013.01 - EP US); **F25J 3/04672** (2013.01 - EP US); **F25J 3/04678** (2013.01 - EP US); **F25J 3/04775** (2013.01 - EP US); **F25J 3/04812** (2013.01 - EP US); **F25J 3/0483** (2013.01 - EP US); **F25J 3/04836** (2013.01 - EP US); **F25J 2205/66** (2013.01 - EP US); **F25J 2205/72** (2013.01 - EP US); **F25J 2245/40** (2013.01 - EP US); **F25J 2250/40** (2013.01 - EP US); **F25J 2280/02** (2013.01 - EP US); **F25J 2290/62** (2013.01 - EP US)

Citation (search report)

See references of WO 2008084167A2

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**FR 2910604 A1 20080627**; **FR 2910604 B1 20121026**; CN 101595356 A 20091202; CN 101595356 B 20121128; EP 2104825 A2 20090930; EP 2104825 B1 20180815; US 2010011811 A1 20100121; US 2014202208 A1 20140724; US 8713964 B2 20140506; US 9546815 B2 20170117; WO 2008084167 A2 20080717; WO 2008084167 A3 20090522

DOCDB simple family (application)

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