

Title (en)

METHOD AND APPARATUS FOR REMOVING NITROGEN FROM A CRYOGENIC HYDROCARBON COMPOSITION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BESEITIGUNG VON STICKSTOFF AUS EINER KRYOGENEN KOHLENWASSERSTOFFZUSAMMENSETZUNG

Title (fr)

PROCÉDÉ ET APPAREIL POUR RETIRER L'AZOTE D'UNE COMPOSITION D'HYDROCARBURES CRYOGÉNIQUES

Publication

**EP 2791601 A2 20141022 (EN)**

Application

**EP 12799178 A 20121210**

Priority

- EP 11192922 A 20111212
- EP 2012074957 W 20121210
- EP 12799178 A 20121210

Abstract (en)

[origin: WO2013087569A2] Nitrogen is removed from a cryogenic hydrocarbon composition. A least a first portion of the cryogenic hydrocarbon composition is fed to a nitrogen stripper column as a first nitrogen stripper feed stream. A nitrogen-stripped liquid is drawn from the nitrogen stripper column. A liquid hydrocarbon product stream and a process vapour are produced comprising at least a step of depressurizing the nitrogen-stripped liquid to a flash pressure. The process vapour is compressed, and selectively split into a stripping portion and a non-stripping portion. A stripping vapour stream comprising at least the stripping portion is passed into the nitrogen stripper column. A vapour fraction is discharged as off gas, comprising a discharge fraction of overhead vapour from the nitrogen stripper column and comprising at least the bypass portion from the non-stripping portion of the compressed vapour, which bypasses a stripping section positioned in the nitrogen stripper column.

IPC 8 full level

**F25J 3/02** (2006.01); **F25J 1/00** (2006.01); **F25J 1/02** (2006.01)

CPC (source: EP RU)

**F25J 1/0022** (2013.01 - EP); **F25J 1/004** (2013.01 - EP); **F25J 1/0042** (2013.01 - EP); **F25J 1/0052** (2013.01 - EP); **F25J 1/0055** (2013.01 - EP); **F25J 1/0214** (2013.01 - EP); **F25J 1/0216** (2013.01 - EP); **F25J 1/0237** (2013.01 - EP RU); **F25J 1/0255** (2013.01 - EP); **F25J 1/0284** (2013.01 - EP); **F25J 1/0292** (2013.01 - EP); **F25J 3/0209** (2013.01 - EP RU); **F25J 3/0233** (2013.01 - EP); **F25J 3/0257** (2013.01 - EP RU); **F25J 2200/02** (2013.01 - EP); **F25J 2200/40** (2013.01 - EP); **F25J 2200/50** (2013.01 - EP); **F25J 2200/74** (2013.01 - EP); **F25J 2200/94** (2013.01 - EP); **F25J 2205/02** (2013.01 - EP); **F25J 2210/06** (2013.01 - EP); **F25J 2215/04** (2013.01 - EP); **F25J 2230/60** (2013.01 - EP); **F25J 2240/30** (2013.01 - EP); **F25J 2245/02** (2013.01 - EP); **F25J 2245/90** (2013.01 - EP); **F25J 2280/02** (2013.01 - EP)

Citation (search report)

See references of WO 2013087569A2

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 2013087569 A2 20130620**; **WO 2013087569 A3 20140501**; AU 2012350742 A1 20140522; AU 2012350742 B2 20150820; CA 2858152 A1 20130620; CA 2858152 C 20200414; CN 103988035 A 20140813; EP 2791601 A2 20141022; EP 2791601 B1 20200624; JP 2015501917 A 20150119; KR 20140103144 A 20140825; MY 172968 A 20191216; RU 2014128669 A 20160210; RU 2607198 C2 20170110

DOCDB simple family (application)

**EP 2012074957 W 20121210**; AU 2012350742 A 20121210; CA 2858152 A 20121210; CN 201280061161 A 20121210; EP 12799178 A 20121210; JP 2014546441 A 20121210; KR 20147019092 A 20121210; MY PI2014701220 A 20121210; RU 2014128669 A 20121210