Title (en)

NITROGEN REJECTION COLUMN REBOILER CONFIGURATION

Title (de)

STICKSTOFFABSCHEIDUNGSKOLONNENAUFKOCHERKONFIGURATION

Title (fr)

CONFIGURATION DE REBOUILLEUR D'UNE COLONNE DE REJET D'AZOTE

Publication

EP 2179235 A2 20100428 (EN)

Application

EP 08762994 A 20080616

Priority

- IB 2008001742 W 20080616
- US 76497507 A 20070619

Abstract (en)

[origin: US2008314079A1] A process is provided for denitrogenation of a crude LNG stream. A crude LNG stream comprising between about 1% and 10% nitrogen, and the remainder methane and heavier hydrocarbons, is expanded in a means for expansion, and cooled. Resultant crude LNG stream is introduced into nitrogen rejection column, wherein nitrogen content of LNG is reduced. A nitrogen-enriched vapor stream is withdrawn from top of the column, and a nitrogen-diminished liquid stream is withdrawn from bottom of the column. The nitrogen-diminished bottoms LNG stream is pumped to higher pressure and then divided into two streams. The second stream is reduced in pressure and then passed through reboiler heat exchanger, thus cooling the crude LNG stream. Partially vaporized second stream is reinjected into column at a level above the level of withdrawal of nitrogen-diminished bottoms LNG stream and below the level of introduction of crude LNG feed stream to provide column boilup.

IPC 8 full level

F25J 3/02 (2006.01)

CPC (source: EP KR US)

F25J 3/02 (2013.01 - KR); **F25J 3/0209** (2013.01 - EP US); **F25J 3/0233** (2013.01 - EP US); **F25J 3/0257** (2013.01 - EP US); F25J 2200/02 (2013.01 - EP US); F25J 2200/40 (2013.01 - EP US); F25J 2200/70 (2013.01 - EP US); F25J 2215/04 (2013.01 - EP US); F25J 2235/60 (2013.01 - EP US); F25J 2240/30 (2013.01 - EP US); F25J 2240/40 (2013.01 - EP US); F25J 2250/02 (2013.01 - EP US); F25J 2270/02 (2013.01 - EP US)

Citation (search report)

See references of WO 2008155653A2

Cited by

CN108369061A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

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US 76497507 A 20070619; AU 2008264885 A 20080616; BR PI0812568 A 20080616; CA 2687886 A 20080616; CN 200880020926 A 20080616; EP 08762994 A 20080616; IB 2008001742 W 20080616; JP 2010512805 A 20080616; KR 20097025820 A 20080616; PE 2008001043 A 20080618; RU 2010101417 A 20080616; TW 97122607 A 20080617