

Title (en)

METHOD FOR THE LIQUEFACTION OF A HYDROCARBON-RICH SYSTEM

Title (de)

VERFAHREN ZUR VERFLÜSSIGUNG EINES KOHLENWASSERSTOFFREICHEN SYSTEMS

Title (fr)

PROCÉDÉ DE REFROIDISSEMENT D'UN COURANT DE PRODUIT, EN PARTICULIER D'UN COURANT DE GAZ NATUREL

Publication

EP 1864064 A1 20071212 (EN)

Application

EP 06724956 A 20060307

Priority

- EP 2006060500 W 20060307
- EP 05101814 A 20050309
- EP 06724956 A 20060307

Abstract (en)

[origin: WO2006094969A1] The present invention relates to a method for the liquefaction of a hydrocarbon-rich stream, preferably a natural gas containing stream, by heat exchanging against a refrigerant (1a-d) . The liquid refrigerant (19) is evaporated using heat from the hydrocarbon-rich stream, thereby obtaining an evaporated refrigerant (3a-d) . The evaporated refrigerant (3a-d) is subsequently compressed (5), cooled (10) against ambient thereby fully condensing the compressed refrigerant. Next, the fully condensed compressed refrigerant (12) is further sub-cooled (14) by indirect heat exchange against an auxiliary refrigerant being cycled in an auxiliary refrigerant. Then the subcooled refrigerant (16) is expanded (18) thereby forming the liquid refrigerant (19).

IPC 8 full level

F25J 1/02 (2006.01); **F25B 7/00** (2006.01); **F25B 40/02** (2006.01)

CPC (source: EP US)

F25B 7/00 (2013.01 - EP US); **F25J 1/0022** (2013.01 - EP US); **F25J 1/0055** (2013.01 - EP US); **F25J 1/0057** (2013.01 - EP US);
F25J 1/0087 (2013.01 - EP US); **F25J 1/009** (2013.01 - EP US); **F25J 1/0254** (2013.01 - EP US); **F25J 1/0267** (2013.01 - EP US);
F25J 1/0268 (2013.01 - EP US); **F25J 1/0292** (2013.01 - EP US); **F25J 1/0297** (2013.01 - EP US); **F25B 2400/13** (2013.01 - EP US);
F25B 2400/23 (2013.01 - EP US); **F25J 2270/12** (2013.01 - EP); **F25J 2270/60** (2013.01 - EP)

Citation (search report)

See references of WO 2006094969A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006094969 A1 20060914; AU 2006222005 A1 20060914; AU 2006222005 B2 20090618; EP 1864064 A1 20071212;
RU 2007137274 A 20090420; RU 2386090 C2 20100410; US 2008173043 A1 20080724

DOCDB simple family (application)

EP 2006060500 W 20060307; AU 2006222005 A 20060307; EP 06724956 A 20060307; RU 2007137274 A 20060307; US 88579506 A 20060307