

Title (en)  
NATURAL GAS LIQUEFACTION

Title (de)  
ERDGASVERFLÜSSIGUNG

Title (fr)  
LIQUEFACTION DE GAZ NATUREL

Publication  
**EP 1397629 A1 20040317 (EN)**

Application  
**EP 02778941 A 20020604**

Priority  
• US 0217675 W 20020604  
• US 29684801 P 20010608

Abstract (en)  
[origin: WO02101307A1] A process for liquefying natural gas (50) in conjunction with producing a liquid stream containing predominantly hydrocarbons heavier than methane (41) is disclosed. In the process, the natural gas stream to be liquefied (31) is partially cooled, expanded to an intermediate pressure (14,15), and supplied to a distillation column (19). The bottom product (41) from this distillation column preferentially contains the majority of any hydrocarbons heavier than methane that would otherwise reduce the purity of the liquefied natural gas (50). The residual gas stream (37) from the distillation column (19) is compressed (16) to a higher intermediate pressure, cooled under pressure (60) to condense it, and then expanded (61) to low pressure to form the liquefied natural gas stream.

IPC 1-7

**F25J 3/02**

IPC 8 full level

**F25J 1/00** (2006.01); **C10L 3/06** (2006.01); **F25J 1/02** (2006.01); **F25J 3/02** (2006.01)

CPC (source: EP KR)

**F25J 1/0022** (2013.01 - EP); **F25J 1/0035** (2013.01 - EP); **F25J 1/0042** (2013.01 - EP); **F25J 1/0052** (2013.01 - EP); **F25J 1/0057** (2013.01 - EP); **F25J 1/0216** (2013.01 - EP); **F25J 1/0239** (2013.01 - EP); **F25J 1/0241** (2013.01 - EP); **F25J 3/02** (2013.01 - KR); **F25J 3/0209** (2013.01 - EP); **F25J 3/0233** (2013.01 - EP); **F25J 3/0238** (2013.01 - EP); **F25J 3/0242** (2013.01 - EP); **F25J 3/0247** (2013.01 - EP); **F25J 2200/02** (2013.01 - EP); **F25J 2200/04** (2013.01 - EP); **F25J 2200/70** (2013.01 - EP); **F25J 2200/72** (2013.01 - EP); **F25J 2200/74** (2013.01 - EP); **F25J 2200/78** (2013.01 - EP); **F25J 2205/04** (2013.01 - EP); **F25J 2230/08** (2013.01 - EP); **F25J 2230/60** (2013.01 - EP); **F25J 2235/60** (2013.01 - EP); **F25J 2240/02** (2013.01 - EP); **F25J 2240/30** (2013.01 - EP); **F25J 2240/40** (2013.01 - EP); **F25J 2245/02** (2013.01 - EP); **F25J 2270/12** (2013.01 - EP); **F25J 2270/60** (2013.01 - EP); **F25J 2270/66** (2013.01 - EP); **F25J 2290/40** (2013.01 - EP)

Citation (search report)

See references of WO 02101307A1

Cited by

US11408673B2; US11428463B2; US10480851B2; US9441877B2; US10502483B2; US10663221B2; US11408676B2; US12104849B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 02101307 A1 20021219; WO 02101307 B1 20030403;** AR 034457 A1 20040225; AU 2008200409 A1 20080221; AU 2008200409 B2 20090820; BR 0210928 A 20041005; BR 0210928 B1 20141021; CA 2448884 A1 20021219; CA 2448884 C 20120515; CA 2746624 A1 20021219; CA 2746624 C 20130528; CN 100449235 C 20090107; CN 1592836 A 20050309; EA 005326 B1 20050224; EA 200400014 A1 20040826; EP 1397629 A1 20040317; HK 1071423 A1 20050715; JP 2004530858 A 20041007; JP 2009174849 A 20090806; JP 2012189315 A 20121004; JP 2015166670 A 20150924; JP 5041650 B2 20121003; JP 5847371 B2 20160120; KR 100877029 B1 20090107; KR 20040018265 A 20040302; MX PA03011267 A 20041028; MY 138353 A 20090529; NO 20035423 D0 20031205; NZ 529941 A 20060428; NZ 542045 A 20070330; SA 02230280 B1 20080521; TW 580554 B 20040321; UA 76750 C2 20060915; ZA 200309504 B 20040802

DOCDB simple family (application)

**US 0217675 W 20020604;** AR P020102186 A 20020610; AU 2008200409 A 20080125; BR 0210928 A 20020604; CA 2448884 A 20020604; CA 2746624 A 20020604; CN 02814294 A 20020604; EA 200400014 A 20020604; EP 02778941 A 20020604; HK 05104005 A 20050513; JP 2003504027 A 20020604; JP 2009037799 A 20090220; JP 2012076611 A 20120329; JP 2015102737 A 20150520; KR 20037016093 A 20031208; MX PA03011267 A 20020604; MY PI20022122 A 20020607; NO 20035423 A 20031205; NZ 52994102 A 20020604; NZ 54204502 A 20020604; SA 02230280 A 20020901; TW 91112453 A 20020607; UA 20031211096 A 20020604; ZA 200309504 A 20031208