

Title (en)
Method for liquefying natural gas.

Title (de)
Verfahren zur Verflüssigung von Erdgas.

Title (fr)
Procédé de liquéfaction de gaz naturel.

Publication
EP 0535752 B1 19951122 (FR)

Application
EP 92203009 A 19920930

Priority
FR 9112007 A 19910930

Abstract (en)
[origin: EP0535752A1] Method for liquefying natural gas, comprising a prior stage of fractionating the gas. <??>The gas (1) is cooled and separated into a liquid phase (6) and a gaseous phase (8). The latter is reduced in pressure (9) and combined with the liquid phase in the column (7). The gas enriched in methane is separated at the head (21), and is recompressed (27) and sent for liquefaction (32, 33, 34). The liquid phase from the bottom of the column (7) is reduced in pressure and rectified in the column (14); the outflow from the head (19) is condensed (20) and returned as reflux (25) to the column (7). The pressure in the column (7) is greater than that in the column (14). The C3+ hydrocarbons are separated at the bottom (16). The liquefaction of the methane (33, 34) is conventional. <??>Use for producing liquid methane for land or sea transportation. <IMAGE>

IPC 1-7
F25J 3/02

IPC 8 full level
F25J 1/00 (2006.01); **F25J 1/02** (2006.01); **F25J 3/02** (2006.01)

CPC (source: EP US)
F25J 1/0022 (2013.01 - EP US); **F25J 1/0035** (2013.01 - EP US); **F25J 1/0052** (2013.01 - EP US); **F25J 1/0055** (2013.01 - EP US); **F25J 1/0214** (2013.01 - EP US); **F25J 1/0216** (2013.01 - EP US); **F25J 1/0239** (2013.01 - EP); **F25J 1/0292** (2013.01 - EP US); **F25J 3/0209** (2013.01 - EP US); **F25J 3/0233** (2013.01 - EP US); **F25J 3/0242** (2013.01 - EP US); **F25J 2200/04** (2013.01 - EP US); **F25J 2200/72** (2013.01 - EP US); **F25J 2200/74** (2013.01 - EP US); **F25J 2200/78** (2013.01 - EP US); **F25J 2205/04** (2013.01 - EP US); **F25J 2220/60** (2013.01 - EP US); **F25J 2220/66** (2013.01 - EP US); **F25J 2235/60** (2013.01 - EP US); **F25J 2240/02** (2013.01 - EP US); **F25J 2270/12** (2013.01 - EP US); **F25J 2270/60** (2013.01 - EP US); **F25J 2270/66** (2013.01 - EP US)

Cited by
FR3056223A1; EP0988497A4; EP4045859A4; WO2021076881A1; US9086188B2; WO2018055264A1; US7644676B2; US7841288B2; US8028724B2; US8820096B2; US8943841B2; US10352499B2; US10508769B2; US11168837B2

Designated contracting state (EPC)
BE DE ES FR GB IT NL

DOCDB simple family (publication)
EP 0535752 A1 19930407; **EP 0535752 B1 19951122**; AR 247945 A1 19950428; AU 2612792 A 19930401; AU 648695 B2 19940428; CA 2079407 A1 19930331; CA 2079407 C 20010515; DE 69206232 D1 19960104; DE 69206232 T2 19960718; DZ 1625 A1 20020217; EG 20248 A 19980531; ES 2089373 T3 19961001; FR 2681859 A1 19930402; FR 2681859 B1 19940211; JP 3187160 B2 20010711; JP H05240576 A 19930917; MY 107837 A 19960629; NO 177840 B 19950821; NO 177840 C 19951129; NO 923783 D0 19920929; NO 923783 L 19930331; NZ 244542 A 19940726; RU 2093765 C1 19971020; SA 92130161 B1 20040529; US 5291736 A 19940308

DOCDB simple family (application)
EP 92203009 A 19920930; AR 32331092 A 19920930; AU 2612792 A 19920930; CA 2079407 A 19920929; DE 69206232 T 19920930; DZ 920127 A 19920929; EG 57492 A 19920929; ES 92203009 T 19920930; FR 9112007 A 19910930; JP 26196992 A 19920930; MY PI19921743 A 19920929; NO 923783 A 19920929; NZ 24454292 A 19920929; SA 92130161 A 19921010; SU 5052813 A 19920929; US 95431892 A 19920930