

Title (en)
METHOD AND SYSTEM FOR PRODUCING LNG

Title (de)
VERFAHREN UND SYSTEM ZUR HERSTELLUNG VON FLÜSSIGERDAS

Title (fr)
PROCÉDÉ ET SYSTÈME POUR LA PRODUCTION DE GNL

Publication
EP 2165140 A1 20100324 (EN)

Application
EP 08779082 A 20080620

Priority
• NO 2008000229 W 20080620
• NO 20073245 A 20070622

Abstract (en)
[origin: WO2009017414A1] A method is described for production of LNG from an incoming feed gas (1) on an onshore or offshore installation, and it is characterised by the following steps: 1) the feed gas is led through a fractionation column (150) where it is cooled and separated in an overhead fraction with a reduced content of pentane (C5) and heavier components, and a bottom fraction enriched with heavier hydrocarbons, 2) the overhead fraction from the fractionation column is fed to a heat exchanger system (110) and is subjected to a partial condensation to form a two-phase fluid, and the two-phase fluid is separated in a suitable separator (160) into a liquid (5) rich in LPG and pentane (C3-C5) which is re-circulated as cold reflux to the fractionation column (150), while the gas (6) containing lower amounts of C5 hydrocarbons and hydrocarbons heavier than C5 is exported for further processing in the heat exchanger system (110) for liquefaction to LNG with a maximum content of ethane and LPG 3) the cooling circuit for liquefaction of gas in the heat exchanger system comprises an open or closed gas expansion process with at least one gas expansion step. A system for carrying out the method is also described.

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

CPC (source: EP KR US)
B01D 3/14 (2013.01 - KR); **C10L 3/08** (2013.01 - KR); **F25J 1/0022** (2013.01 - EP US); **F25J 1/0037** (2013.01 - EP US); **F25J 1/005** (2013.01 - EP US); **F25J 1/0052** (2013.01 - EP US); **F25J 1/0057** (2013.01 - EP US); **F25J 1/0072** (2013.01 - EP US); **F25J 1/0082** (2013.01 - EP US); **F25J 1/0092** (2013.01 - EP US); **F25J 1/0097** (2013.01 - EP US); **F25J 1/02** (2013.01 - KR); **F25J 1/0201** (2013.01 - EP US); **F25J 1/0202** (2013.01 - EP US); **F25J 1/0204** (2013.01 - EP US); **F25J 1/0205** (2013.01 - EP US); **F25J 1/0212** (2013.01 - EP US); **F25J 1/0215** (2013.01 - EP US); **F25J 1/0216** (2013.01 - EP US); **F25J 1/0232** (2013.01 - EP US); **F25J 1/0238** (2013.01 - EP US); **F25J 1/0241** (2013.01 - EP US); **F25J 1/0278** (2013.01 - EP US); **F25J 1/0288** (2013.01 - EP US); **F25J 1/0294** (2013.01 - EP US); **F25J 3/02** (2013.01 - KR); **F25J 2210/06** (2013.01 - EP US); **F25J 2220/64** (2013.01 - EP US); **F25J 2270/16** (2013.01 - EP US); **F25J 2270/90** (2013.01 - EP US)

Citation (search report)
See references of WO 2009017414A1

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)
WO 2009017414 A1 20090205; AU 2008283102 A1 20090205; AU 2008283102 B2 20130207; BR PI0813297 A2 20141230; CA 2692213 A1 20090205; CN 101711335 A 20100519; CN 101711335 B 20141015; EP 2165140 A1 20100324; KR 101568763 B1 20151112; KR 20100039353 A 20100415; MY 163902 A 20171115; NO 20073245 L 20081223; NO 329177 B1 20100906; US 2010132405 A1 20100603

DOCDB simple family (application)
NO 2008000229 W 20080620; AU 2008283102 A 20080620; BR PI0813297 A 20080620; CA 2692213 A 20080620; CN 200880021514 A 20080620; EP 08779082 A 20080620; KR 20107001622 A 20080620; MY PI20095466 A 20080620; NO 20073245 A 20070622; US 66532908 A 20080620