

Title (en)
Method and apparatus for the liquefaction of natural gas

Title (de)
Verfahren und Vorrichtung zur Verflüssigung von Erdgas

Title (fr)
Procédé et appareil pour la liquéfaction de gaz naturel

Publication
EP 2796819 B1 20180606 (EN)

Application
EP 14165010 A 20140416

Priority
US 201313869485 A 20130424

Abstract (en)
[origin: EP2796819A2] A method for the liquefaction of natural gas, comprising: - taking unpurified natural gas from a gas well (101); - pre-treating the gas for removing impurities; - performing a first compression stage (201); - performing a first heat exchange stage (202); - performing a second compression stage (203); - performing a second heat exchange stage (204); - performing a third compression stage (205); - performing a third heat exchange stage (206); - performing an additional regeneration heat exchange stage (207); - performing a first main independent heat exchange cycle (208); - performing a second main heat exchange cycle (209); - passing the gas through a Joule-Thomson valve; - sending the liquefied gas (215) to storage; - injecting the portion of the gas remaining in the gaseous state (210) into the second main heat exchange stage (209) and subsequently re-injecting the remaining gas in the gaseous state into the inlet pipe (122) being mixed with the gas incoming from the treatment plant.

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

CPC (source: EP US)
F25J 1/0022 (2013.01 - EP US); **F25J 1/004** (2013.01 - EP US); **F25J 1/0052** (2013.01 - EP US); **F25J 1/0087** (2013.01 - EP US);
F25J 1/0208 (2013.01 - EP US); **F25J 1/0275** (2013.01 - EP US); **F25J 2290/70** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2796819 A2 20141029; EP 2796819 A3 20151216; EP 2796819 B1 20180606; AR 096064 A1 20151202; ES 2675592 T3 20180711;
TR 201809037 T4 20180723; US 2014318178 A1 20141030

DOCDB simple family (application)
EP 14165010 A 20140416; AR P140101680 A 20140423; ES 14165010 T 20140416; TR 201809037 T 20140416; US 201313869485 A 20130424