

Title (en)

METHOD FOR LIQUEFYING CARBON DIOXIDE FROM A NATURAL GAS STREAM

Title (de)

VERFLÜSSIGUNGSVERFAHREN VON KOHLENDIOXID AUS EINEM ERDGASSTROM

Title (fr)

PROCÉDÉ DE LIQUÉFACTION DE DIOXYDE DE CARBONE ISSU D'UN COURANT DE GAZ NATUREL

Publication

EP 3252406 B1 20200701 (FR)

Application

EP 17171766 A 20170518

Priority

FR 1654996 A 20160602

Abstract (en)

[origin: US2017350648A1] A process for producing liquefied natural gas and liquid carbon dioxide comprising: Step a): separating a natural gas feed gas into a CO₂-enriched gas stream and a CO₂-depleted natural gas stream; Step b): liquefying the CO₂-depleted natural gas stream in a liquefaction unit comprising at least a main heat exchanger and a system for producing frigorities, said liquefaction unit comprising at least one refrigeration cycle fed by a refrigerant stream; Step c): simultaneous liquefying of the CO₂-enriched gas stream resulting from step a) in a CO₂ liquefaction unit; wherein the refrigeration necessary for the liquefaction of the CO₂-enriched gas stream and for the liquefaction of the natural gas is supplied by said frigorite-producing system of the liquefaction unit and in that the refrigeration necessary for the liquefaction of the CO₂-enriched gas stream originates from a portion of said refrigerant stream supplying the refrigeration cycle of said liquefaction unit.

IPC 8 full level

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CPC (source: EP US)

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