

Title (en)

METHOD FOR LIQUEFYING A NATURAL GAS, INCLUDING A PHASE CHANGE

Title (de)

VERFAHREN ZUR VERFLÜSSIGUNG EINES ERDGASES MIT EINER PHASENÄNDERUNG

Title (fr)

PROCÉDÉ DE LIQUÉFACTION DE GAZ NATUREL AVEC CHANGEMENT DE PHASE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2014013158A2] The present invention relates to a method for liquefying a natural gas in at least one cryogenic heat exchanger (EC1) by indirect contact circulation with at least one flow (SI) of coolant entering substantially at temperature TO in a first inlet (AA1) in said exchanger (EC1) and at a pressure PI, passing through said exchanger in cocurrent flow with respect to said natural gas flow (Sg), exiting (BB) at in a liquid state, then depressurized by a pressure reducer (DI) at the cold end (BB) of said exchanger (EC1) to return to a gaseous state at a pressure P1 less than PI and at a temperature T1 less than TO, before exiting again through the outlet (AA3) of the hot end (AA) of said exchanger (EC1) in a gaseous state, and substantially at temperature T0. Said coolant in a gaseous state is then partially liquefied again and conveyed to the inlet (AA1) of said exchanger by compression in a first compressor (C1), then by a partial condensation in a first condenser (HO) and by a phase separation, a first liquid phase (d1a) being conveyed at least in part to said first inlet (AA1), a first gas phase (d1b) being compressed by a second compressor (CIA), then cooled in an desuperheater (DS) by contact with a portion (dlc) of said first liquid phase (d1a) at the outlet of said first separator, before condensation in a second condenser (H1).

IPC 8 full level

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Citation (search report)

See references of WO 2014013158A2

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