

Title (en)
Improved process and apparatus for cooling and liquefaction of natural gas

Title (de)
Verbessertes Verfahren und Anlage für die Kühlung und Verflüssigung von Erdgas

Title (fr)
Procédé et installation perfectionnés de refroidissement, en particulier pour la liquéfaction de gaz naturel

Publication
EP 0818661 B1 20020911 (FR)

Application
EP 97401367 A 19970616

Priority
FR 9608758 A 19960712

Abstract (en)
[origin: EP0818661A1] The method involves compressing a coolant mixture in a pre-final stage (1A) through a series of stages of a compression unit (1). The mixture is condensed partially by cooling, and then is separated to produce a vapour fraction and a liquid fraction. The vapour fraction is cooled and partially condensed, and then passed through a final compression stage (1C) to obtain a high-pressure vapour. Part of the high-pressure vapour fraction and liquid fraction is then cooled, expanded and circulated through a first heat exchanger (5). During the vapour fraction's cooling and partial condensation stage, the vapour fraction obtained from the separation of the condensed mixture is cooled by passing it through a second heat exchanger (18) with the coolant. The condensed mixture is separated in a first separator (14). The vapour fraction from it is condensed in the second heat exchanger, and then passed through a second separator (15) to produce a vapour and a liquid fraction. The vapour fraction is sent to the final compression stage, and the liquid fraction to the first heat exchanger.

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