

Title (en)

PROCESS AND APPARATUS FOR SEPARATION OF NITROGEN FROM LNG

Title (de)

VERFAHREN UND VORRICHTUNG ZUR TRENNUNG VON STICKSTOFF AUS FLÜSSIGERDARGAS

Title (fr)

PROCÉDÉ ET APPAREIL D'EXTRACTION D'AZOTE PRÉSENT DANS DU GNL

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Application

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Abstract (en)

[origin: GB2462555A] A process and apparatus for the separation of nitrogen from a liquefied natural gas (LNG) feed 201 provides cooling of the feed and passing the feed to a fractionation column 206. From the column is withdrawn a nitrogen rich overhead vapour stream 213 and a nitrogen weak liquid stream 207. The overhead vapour stream is compressed via a compression system 219, cooled in a cooler 221, and partially condensed in heat exchange systems 214, 202, before expansion in an expansion turbine 204 and return to the fractionation column as reflux 205. Cooling of the overhead vapour stream is provided by exchange of heat between one or more streams 213, 240, from the fractionation column. The fractionation column may be provided with heat from a reboiler 202, which may be located internally or external to the column. The process and apparatus of the present invention provides an overhead vapour stream from the fractionation that has a composition able to be vented to atmosphere.

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