Title (en)
METHOD AND UNIT FOR PROCESSING A GAS MIXTURE CONTAINING NITROGEN AND METHANE

Title (de)
VERFAHREN UND ANLAGE ZUR VERARBEITUNG EINES STICKSTOFF UND METHAN ENTHALTENDEN GASGEMISCHS

Title (fr)
PROCÉDÉ ET INSTALLATION POUR TRAITER UN MÉLANGE GAZEUX CONTENANT DE L'AZOTE ET DU MÉTHANE

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Application
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Abstract (en)
[origin: WO2021028068A1] Proposed is a method for processing a gas mixture containing nitrogen and methane, said gas mixture being at least partly liquefied using a mixed refrigerant circuit and is expanded in a storage tank (L), wherein: formed in the storage tank (L) are a liquid phase, which is depleted in nitrogen and enriched with methane relative to the gas mixture, and a vapour phase, which is enriched with nitrogen and depleted in methane relative to the gas mixture; at least some of the vapour phase is compressed, at least partly liquefied, and subjected to low-temperature rectification (T1); and formed in the low-temperature rectification (T1) are a top gas rich in nitrogen and lean in methane, and a bottom liquid lean in nitrogen and rich in methane. The invention provides that the partial liquefaction of the vapour phase is caused by cooling by means of heat exchange using the mixed refrigerant circuit.

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