

Title (en)

METHOD AND SYSTEM FOR RECOVERY OF METHANE FROM HYDROCARBON STREAMS

Title (de)

VERFAHREN UND SYSTEM ZUR WIEDERHERSTELLUNG VON METHAN AUS KOHLENWASSERSTOFFSTRÖMEN

Title (fr)

PROCÉDÉ ET SYSTÈME POUR RÉCUPÉRATION DE MÉTHANE À PARTIR DE COURANTS D'HYDROCARBURES

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Application

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Abstract (en)

[origin: WO2016015849A1] The invention relates to a method for recovery of methane from hydrocarbon streams comprising the following steps: a. Introducing a feed fluid stream (F), which comprises methane fluid, at least one hydrocarbon free fluid, wherein in particular said at least one hydrocarbon free fluid is nitrogen, and at least one hydrocarbon fluid, into a demethanizer system (1); b. Separating said feed fluid stream (F) in the demethanizer system (1) into a carbon rich fraction (C), comprising hydrocarbons with a carbon content of C2 and higher, and a separation stream (S), comprising methane fluid and at least one hydrocarbon free fluid; c. Introducing said separation stream (S) into a hydrocarbon-free fluid separation system (2), in particular in a cryogenic hydrocarbon-free fluid separation system (2'), more particularly into a cryogenic nitrogen rejection system (2''); wherein said separation stream (S) is compressed by a compressor system (6) before said separation stream (S) is introduced in said hydrocarbon-free fluid separation system (2), wherein said separation stream is compressed to a pressure of 12 bar to 80 bar; d. Separating said separation stream (S) in said free fluid separation system (2) into a methane stream (M) and a hydrocarbon-free fluid stream (HF) and a respective system for recovery of methane from hydrocarbon streams.

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