

Title (en)

METHOD FOR SEPARATING A MIXTURE OF CARBON MONOXIDE, METHANE, HYDROGEN AND NITROGEN BY CRYOGENIC DISTILLATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR TRENNUNG EINER MISCHUNG AUS KOHLENMONOXID, METHAN, WASSERSTOFF UND STICKSTOFF DURCH KRYOGENE DESTILLATION

Title (fr)

PROCÉDÉ DE SÉPARATION D'UN MÉLANGE DE MONOXYDE DE CARBONE, DE MÉTHANE, D'HYDROGÈNE ET D'AZOTE PAR DISTILLATION CRYOGÉNIQUE

Publication

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Application

EP 07871946 A 20071214

Priority

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Abstract (en)

[origin: WO2008087318A2] The invention relates to a method for separating a mixture comprising at least carbon monoxide, hydrogen, and methane. According to said method, the mixture is separated by a first separating means (C1), at least one liquid fraction of the chamber of the separating means is sent to a product stripper (C2), and at least part of the liquid fraction is sent from the product stripper to a CO/CH₄ separating column (C3) in order to produce a methane-enriched liquid flow and a gaseous flow enriched with carbon monoxide. The process is carried out under cold conditions at least partially as a result of a carbon monoxide cycle, said cycle at least partially ensuring the condensation at the top of the CO/CH₄ separating column and/or the reboiling in the chamber of the product stripper and/or the reboiling in the chamber of the CO/CH₄ separating column and/or the cooling of the mixture for the first separating means.

IPC 8 full level

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Citation (search report)

See references of WO 2008087318A2

Cited by

FR3079288A1; WO2019180374A1

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