

Title (en)  
CRYOGENIC SYSTEM FOR REMOVING ACID GASES FROM A HYDROCARBON GAS STREAM, WITH REMOVAL OF HYDROGEN SULFIDE

Title (de)  
KRYOGENES SYSTEM ZUR ENTFERNUNG SAURER GASE AUS EINEM KOHLENWASSERSTOFFGASSTROM MIT ENTFERNUNG VON WASSERSTOFFSULFID

Title (fr)  
SYSTÈME CRYOGÉNIQUE POUR ENLEVER DES GAZ ACIDES D'UN COURANT D'HYDROCARBURE GAZEUX, AVEC ÉLIMINATION DE SULFURE D'HYDROGÈNE

Publication  
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Application  
**EP 10827299 A 20100802**

Priority  
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Abstract (en)  
[origin: WO2011053400A1] A system for removing acid gases from a raw gas stream includes an acid gas removal system (AGRS) and a sulfurous components removal system (SCRS). The acid gas removal system receives a sour gas stream and separates it into an overhead gas stream comprised primarily of methane, and a bottom acid gas stream comprised primarily of carbon dioxide. The sulfurous components removal system is placed either upstream or downstream of the acid gas removal system. The SCRS receives a gas stream and generally separates the gas stream into a first fluid stream comprising hydrogen sulfide, and a second fluid stream comprising carbon dioxide. Where the SCRS is upstream of the AGRS, the second fluid stream also includes primarily methane. Where the SCRS is downstream of the AGRS, the second fluid stream is principally carbon dioxide. Various types of sulfurous components removal systems may be utilized.

IPC 8 full level  
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CPC (source: EP US)  
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• [A] WO 2009027491 A1 20090305 - SHELL INT RESEARCH [NL], et al  
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• [A] NORTHROP P S ET AL: "CRYOGENIC SOUR GAS PROCESS ATTRACTIVE FOR ACID GAS INJECTION APPLICATIONS", PROCEEDINGS GAS PROCESSORS ASSOCIATION. GPA MEETING/ANNUALCONVENTION, XX, XX, 14 March 2004 (2004-03-14), pages 1 - 08, XP001223962  
• [A] VALENCIA J A ET AL: "Controlled Freeze Zone™ Technology for Enabling Processing of High CO2 and H2S Gas Reserves", INTERNATIONAL PETROLEUM TECHNOLOGY CONFERENCE; INTERNATIONAL PETROLEUM TECHNOLOGY CONFERENCE, IPTC 2008, SOCIETY OF PETROLEUM ENGINEERS, GB; KUALA LUMPUR, IN, vol. 4, 1 January 2008 (2008-01-01), pages 2358 - 2363, XP008160042, ISBN: 978-1-60560-954-6, DOI: 10.2523/12708-MS  
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