

Title (en)

TREATMENT OF ACID GAS USING HYBRID MEMBRANE SEPARATION SYSTEMS.

Title (de)

BEHANDLUNG VON SAUREM GAS MIT HYBRIDMEMBRAN ANLAGE.

Title (fr)

TRAITEMENT DE GAZ ACIDES AU MOYEN DE SYSTEMES DE SEPARATION A MEMBRANES HYBRIDES.

Publication

EP 0641244 A1 19950308 (EN)

Application

EP 92912590 A 19920514

Priority

- US 9204026 W 19920514
- US 70351891 A 19910521

Abstract (en)

[origin: WO9220431A1] A system and method for separating acid gas from natural gas which utilizes a hybrid membrane system comprising a hydrogen sulfide membrane assembly, an acid gas membrane assembly, and, optionally, a dehydration membrane assembly. This hybrid membrane system is preferably used together with a means for converting the separated hydrogen sulfide into elemental sulfur, i.e., a Claus sulfur plant. The hydrogen sulfide membrane assembly preferably comprises a gel polymer membrane, molten salt membrane and/or rubber copolymer membrane. The acid gas membrane assembly preferably comprises a cellulose acetate membrane, polyimide membrane, polysiloxane membrane, and/or pyrolone membrane. The dehydration membrane assembly preferably comprises a polysiloxane membrane.

IPC 1-7

B01D 53/22; C07C 7/144

IPC 8 full level

B01D 53/22 (2006.01); **C01B 17/04** (2006.01); **C01B 17/16** (2006.01); **C07C 7/144** (2006.01); **C07C 9/04** (2006.01); **C10L 3/10** (2006.01)

CPC (source: EP)

B01D 53/22 (2013.01); **C01B 17/0408** (2013.01); **C01B 17/167** (2013.01); **C10L 3/10** (2013.01)

Citation (search report)

See references of WO 9220431A1

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

WO 9220431 A1 19921126; CA 2108892 A1 19921122; EP 0641244 A1 19950308; JP H06504949 A 19940609; NO 934178 D0 19931118; NO 934178 L 19931118

DOCDB simple family (application)

US 9204026 W 19920514; CA 2108892 A 19920514; EP 92912590 A 19920514; JP 50017892 A 19920514; NO 934178 A 19931118