Title (en)
METHOD FOR REMOVING SULFUR-CONTAINING CONTAMINANTS, AROMATICS ANDHYDROCARBONS FROM GAS

Title (de)
VERFAHREN ZUM ENTFERNEN VON SCHWEFELHALTIGEN VERUNREINIGUNGEN, AROMATEN UND KOHLENWASSERSTOFFEN AUS GAS

Title (fr)
PROCEDE POUR ELIMINER LES CONTAMINANTS A TENEUR EN SOUFRE, LES AROMATIQUES ET LES HYDROCARBURES CONTENUS DANS UN GAZ

Publication
EP 0880395 A1 19981202 (EN)

Application
EP 97900807 A 19970120

Priority
• NL 9700018 W 19970120
• NL 1002134 A 19960119

Abstract (en)

[origin: WO9726069A1] The invention relates to a method for removing sulfur-containing contaminants in the form of mercaptans and H2S from a hydrocarbon gas, which may also contain CO2 and higher aliphatic and aromatic hydrocarbons, and recovering elemental sulfur, wherein in a first absorption step the sulfur-containing contaminants are removed from the gas, to form on the one hand a purified gas stream and on the other hand a sour gas, which sour gas is hydrogenated in order to convert the greater part of the mercaptans to H2S, whereafter the hydrogenated sour gas is fed to a second absorption stage in which the sour gas is separated into an H2S-enriched first gas stream, which is fed to a Claus plant, followed by a selective oxidation step of H2S to elemental sulfur in the tail gas, and an H2S-reduced second gas stream, which second gas stream is combusted.

IPC 1-7
B01D 53/14; B01D 53/86; B01D 53/75; C01B 17/04

IPC 8 full level
B01D 53/48 (2006.01); **B01D 53/14** (2006.01); **B01D 53/75** (2006.01); **B01D 53/86** (2006.01); **C01B 17/04** (2006.01); **C10L 3/10** (2006.01)

CPC (source: EP KR)
B01D 53/14 (2013.01 - KR); **B01D 53/1406** (2013.01 - EP); **B01D 53/75** (2013.01 - EP); **B01D 53/86** (2013.01 - KR); **B01D 53/8612** (2013.01 - EP); **C01B 17/0408** (2013.01 - EP)

Citation (search report)
See references of WO 9726069A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IT LI NL PT SE

DOCDB simple family (publication)
WO 9726069 A1 19970724; AU 1321397 A 19970811; CA 2241790 A1 19970724; CN 1208360 A 19990217; EP 0880395 A1 19981202; JP 2000503293 A 20000321; KR 19990077361 A 19991025; NL 1002134 C2 19970722; TW 381043 B 20000201; ZA 97370 B 19970717

DOCDB simple family (application)
NL 9700018 W 19970120; AU 1321397 A 19970120; CA 2241790 A 19970120; CN 97191710 A 19970120; EP 97900807 A 19970120; JP 52588597 A 19970120; KR 19980705510 A 19980718; NL 1002134 A 19960119; TW 86100467 A 19970117; ZA 97370 A 19970116