

Title (en)

METHOD AND DEVICE FOR REMOVING ORGANIC SULPHUR COMPOUNDS FROM HYDROGEN-RICH GASES

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ENTFERNEN VON ORGANISCHEN SCHWEFELVERBINDUNGEN AUS WASSERSTOFFREICHEN GASEN

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT D'ÉLIMINER DES COMPOSÉS DE SOUFRE ORGANIQUES CONTENUS DANS DES GAZ RICHES EN HYDROGÈNE

Publication

EP 3506995 A1 20190710 (DE)

Application

EP 17758506 A 20170825

Priority

- DE 102016116306 A 20160901
- EP 2017071397 W 20170825

Abstract (en)

[origin: WO2018041728A1] The invention relates to a method for separating sulphur from a hydrogen-rich gas containing carbon disulphide compounds and oxygen, in which carbon disulphide compounds are converted into hydrogen sulphide using a catalyst, a noble metal catalyst being used as the catalyst. The use of the noble metal catalyst allows oxygen to be converted into water at the same time as the reduction of the carbon disulphide compounds. Furthermore, the oxygen reduction can provide the energy required to heat the catalyst. The invention also relates to a device for carrying out a corresponding method.

IPC 8 full level

B01D 53/86 (2006.01); **B01J 23/38** (2006.01); **C10K 1/00** (2006.01); **C10K 1/34** (2006.01)

CPC (source: EP KR)

B01D 53/8603 (2013.01 - EP KR); **B01J 23/38** (2013.01 - EP KR); **B01J 23/42** (2013.01 - EP); **B01J 23/44** (2013.01 - EP); **B01J 23/882** (2013.01 - EP); **B01J 23/883** (2013.01 - EP); **C01B 3/58** (2013.01 - EP); **C10K 1/004** (2013.01 - EP KR); **C10K 1/34** (2013.01 - EP KR); **B01D 2251/102** (2013.01 - EP KR); **B01D 2251/202** (2013.01 - EP KR); **B01D 2255/10** (2013.01 - EP KR); **B01D 2257/306** (2013.01 - EP KR); **B01D 2257/308** (2013.01 - EP KR); **C01B 2203/045** (2013.01 - EP KR); **C01B 2203/048** (2013.01 - EP KR); **C01B 2203/0485** (2013.01 - EP KR)

Citation (search report)

See references of WO 2018041728A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102016116306 A1 20180301; CN 109641176 A 20190416; EP 3506995 A1 20190710; JP 2019529306 A 20191017; KR 102242266 B1 20210421; KR 20190041520 A 20190422; UA 123236 C2 20210303; WO 2018041728 A1 20180308

DOCDB simple family (application)

DE 102016116306 A 20160901; CN 201780052048 A 20170825; EP 17758506 A 20170825; EP 2017071397 W 20170825; JP 2019511776 A 20170825; KR 20197008976 A 20170825; UA A201903056 A 20170825