

Title (en)

PROCESS FOR REMOVING SULPHUR-CONTAINING CONTAMINANTS FROM A GAS STREAM

Title (de)

VERFAHREN ZUM ENTFERNEN VON SCHWEFELHALTIGEN VERUNREINIGUNGEN AUS EINEM GASSTROM

Title (fr)

PROCÉDÉ DE SÉPARATION DES CONTAMINANTS SOUFRÉS CONTENUS DANS UN FLUX GAZEUX

Publication

EP 2658632 A1 20131106 (EN)

Application

EP 11802961 A 20111228

Priority

- EP 10197457 A 20101231
- EP 2011074179 W 20111228
- EP 11802961 A 20111228

Abstract (en)

[origin: WO2012089776A1] A process for removing sulphur-containing contaminants including hydrogen sulphide, from a gas stream, comprising the steps of subjecting the gas stream to an oxidation treatment, extracting heat from the resulting gas stream, reacting catalytically H₂ S from said cooled gas stream with sulphur dioxide at elevated temperature to obtain a gas stream which comprises sulphur and water, separating sulphur thereby obtaining a H₂ S-lean gas stream, subjecting it to an oxidation treatment, extracting heat from the SO₂-enriched gas stream obtained therein; subjecting a sulphur-containing residual hydrocarbon product to an oxidation treatment to obtain a gas stream which contains SO₂, extracting heat from said gas stream which comprises SO₂, subjecting both streams containing SO₂ to a quench process, absorbing SO₂ from the resulting gas stream to obtain a SO₂-enriched absorption solvent which is regenerated and using the SO₂-enriched gas stream produced therein as SO₂ source for Claus Process.

IPC 8 full level

B01D 53/14 (2006.01); **B01D 53/86** (2006.01); **C01B 17/04** (2006.01)

CPC (source: EP)

B01D 53/8615 (2013.01); **B01D 53/8618** (2013.01); **C01B 17/0404** (2013.01); **C01B 17/0434** (2013.01); **C01B 17/0456** (2013.01); **B01D 53/1475** (2013.01); **B01D 2257/304** (2013.01); **B01D 2257/306** (2013.01); **B01D 2257/308** (2013.01); **B01D 2257/504** (2013.01); **Y02C 20/40** (2020.08); **Y02P 20/151** (2015.11)

Citation (search report)

See references of WO 2012089776A1

Cited by

CN108472574A

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

DOCDB simple family (publication)

WO 2012089776 A1 20120705; CA 2823228 A1 20120705; EA 201300779 A1 20140331; EP 2658632 A1 20131106

DOCDB simple family (application)

EP 2011074179 W 20111228; CA 2823228 A 20111228; EA 201300779 A 20111228; EP 11802961 A 20111228