

Title (en)
PROCESS FOR WORKUP OF A CARBON DIOXIDE-RICH GAS TO BE FREED OF SULFUR COMPONENTS

Title (de)
VERFAHREN ZUR VERARBEITUNG EINES VON SCHWEFELKOMPONENTEN ZU REINIGENDEN KOHLENDIOXIDREICHEN GASES

Title (fr)
PROCÉDÉ POUR LE TRAITEMENT D'UN GAZ RICHE EN DIOXYDE DE CARBONE DEVANT ÊTRE DÉBARRASSÉ DES COMPOSANTS SULFURÉS

Publication
EP 2552569 A1 20130206 (DE)

Application
EP 11712170 A 20110322

Priority
• DE 102010013279 A 20100329
• EP 2011001397 W 20110322

Abstract (en)
[origin: CA2792812A1] The invention relates to a process for workup of an industrial carbon dioxide-rich gas to be freed of sulfur components, in which an industrial gas to be freed of sulfur components is purified by a gas scrubbing, and the laden solvent is freed of carbon dioxide and hydrogen sulfide by a regeneration to obtain at least one acid gas fraction having a relatively high content of sulfur components, and the fraction with the highest hydrogen sulfide (H₂S) content is supplied to a Claus plant with downstream Claus process gas hydrogenation, and at least one carbon dioxide-laden, low-hydrogen sulfide acid gas fraction from the regeneration device, which has a reduced sulfur content compared to the fraction with the highest hydrogen sulfide (H₂S) content, is combined with the hydrogenated Claus process gas to give a combined process gas stream, which is supplied to further processing or to recycling into the process.

IPC 8 full level
B01D 53/14 (2006.01); **C01B 17/04** (2006.01)

CPC (source: EP KR US)
B01D 53/1418 (2013.01 - EP KR US); **B01D 53/1425** (2013.01 - EP KR US); **B01D 53/1462** (2013.01 - EP KR US);
B01D 53/77 (2013.01 - KR); **C01B 17/0404** (2013.01 - EP KR US); **C01B 17/0408** (2013.01 - EP KR US); **B01D 53/77** (2013.01 - EP US);
B01D 2257/304 (2013.01 - EP KR US); **B01D 2257/306** (2013.01 - EP KR US); **B01D 2257/308** (2013.01 - EP KR US);
Y02C 20/40 (2020.08 - EP KR US); **Y02P 20/133** (2015.11 - EP US); **Y02P 20/151** (2015.11 - EP KR US)

Citation (search report)
See references of WO 2011120647A1

Citation (examination)
WO 9703920 A1 19970206 - MANNESMANN AG [DE], et al

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)
DE 102010013279 B3 20110728; AU 2011234876 A1 20120830; AU 2011238134 A1 20121004; BR 112012024491 A2 20170718;
BR 112012024493 A2 20170822; CA 2792812 A1 201111006; CA 2793638 A1 201111013; CN 102802767 A 20121128;
CN 102802767 B 20150401; CN 102821830 A 20121212; CN 102821830 B 20150520; EP 2552569 A1 20130206; EP 2552570 A1 20130206;
EP 2552570 B1 20140430; KR 20130008600 A 20130122; KR 20130057975 A 20130603; RU 2012138294 A 20140510;
RU 2012142710 A 20140510; RU 2545273 C2 20150327; TW 201202124 A 20120116; TW 201210930 A 20120316;
US 2013017144 A1 20130117; US 2013022534 A1 20130124; US 8568676 B2 20131029; US 8591846 B2 20131126;
WO 2011120647 A1 201111006; WO 2011124326 A1 201111013; ZA 201207560 B 20140129

DOCDB simple family (application)
DE 102010013279 A 20100329; AU 2011234876 A 20110322; AU 2011238134 A 20110322; BR 112012024491 A 20110322;
BR 112012024493 A 20110322; CA 2792812 A 20110322; CA 2793638 A 20110322; CN 201180014239 A 20110322;
CN 201180015071 A 20110322; EP 11712170 A 20110322; EP 11724531 A 20110322; EP 2011001397 W 20110322;
EP 2011001398 W 20110322; KR 20127026292 A 20110322; KR 20127028163 A 20110322; RU 2012138294 A 20110322;
RU 2012142710 A 20110322; TW 100110620 A 20110328; TW 100110621 A 20110328; US 201113638428 A 20110322;
US 201113638449 A 20110322; ZA 201207560 A 20121009