

Title (en)

SYSTEM AND PROCESS TO CAPTURE INDUSTRIAL EMISSIONS AND RECYCLE FOR THE PRODUCTION OF CHEMICALS

Title (de)

SYSTEM UND VERFAHREN ZUR ERFASSUNG VON INDUSTRIEEMISSIONEN UND WIEDERVERWENDUNG ZUR HERSTELLUNG VON CHEMIKALIEN

Title (fr)

SYSTÈME ET PROCÉDÉ POUR CAPTURER DES ÉMISSIONS INDUSTRIELLES ET RECYCLAGE POUR LA PRODUCTION DE PRODUITS CHIMIQUES

Publication

EP 2928852 A4 20170104 (EN)

Application

EP 13860062 A 20131205

Priority

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- IS 2013050010 W 20131205

Abstract (en)

[origin: WO2014087433A1] A system and process is provided for capturing industrial emissions comprising carbon dioxide and sulfur compounds and producing therefrom sulfuric acid and methanol, thus reducing unwanted pollution and converting the undesired waste gases to valuable chemical products. The system comprises an oxygen production unit, a combustion unit for receiving an industrial emissions stream and oxygen, and producing an oxidized emission stream, a catalytic acid production unit to produce sulfuric acid, a hydrogen production unit, a gas conversion unit for producing methanol, and preferably an energy recovery unit to recover reaction heat. The system and process are suitable for recover emission from sulfur emitting geothermal power plants.

IPC 8 full level

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CPC (source: EP)

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Y02C 20/40 (2020.08); **Y02P 20/129** (2015.11); **Y02P 20/151** (2015.11); **Y02P 20/50** (2015.11)

Citation (search report)

- [Y] US 3962300 A 19760608 - HILLER HEINZ, et al
- [Y] WO 2005105666 A2 20051110 - OUTOKUMPU OY [FI], et al
- See references of WO 2014087433A1

Designated contracting state (EPC)

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