

Title (en)
METHOD FOR REDUCING ENERGY AND WATER DEMANDS OF SCRUBBING CO₂ FROM CO₂-LEAN WASTE GASES

Title (de)
VERFAHREN ZUR REDUZIERUNG DES ENERGIE- UND WASSERBEDARFS BEI DER CO₂-WÄSCHE AUS CO₂-ARMEN ABGASEN

Title (fr)
PROCÉDÉ POUR RÉDUIRE LES DEMANDES D'ÉNERGIE ET D'EAU DE LAVAGE DU CO₂ À PARTIR DE GAZ RÉSIDUAIRES PAUVRES EN CO₂

Publication
EP 4294551 A1 20231227 (EN)

Application
EP 22707288 A 20220209

Priority
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• US 2022015723 W 20220209

Abstract (en)
[origin: WO2022177781A1] Methods and systems for reducing greenhouse gas emissions, including producing a waste gas stream comprising from greater than 0 vol% to less than 20 vol%, inclusive, carbon dioxide, pre-concentrating the waste gas stream to increase a concentration of carbon dioxide, producing a concentrated byproduct stream comprising more than 40 vol%, dissolving carbon dioxide contained in the concentrated byproduct stream in water, producing a dissolved byproduct stream and an undissolved byproduct stream, injecting the dissolved byproduct stream or a portion thereof into a reservoir containing mafic rock, and allowing components of the dissolved byproduct stream to react in situ with components of the mafic rock to precipitate and store components of the byproduct stream in the reservoir.

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Citation (search report)
See references of WO 2022177781A1

Designated contracting state (EPC)
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