



(51) International Patent Classification:

B01D 53/14 (2006.01) **B01D 53/62** (2006.01)
B01D 53/18 (2006.01) **B01D 53/78** (2006.01)

(21) International Application Number:

PCT/GB2019/051772

(22) International Filing Date:

24 June 2019 (24.06.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

201811023872 26 June 2018 (26.06.2018) IN
1813839.6 24 August 2018 (24.08.2018) GB

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,

(54) Title: SYSTEM AND PROCESS OF CAPTURING CARBON DIOXIDE FROM FLUE GASES

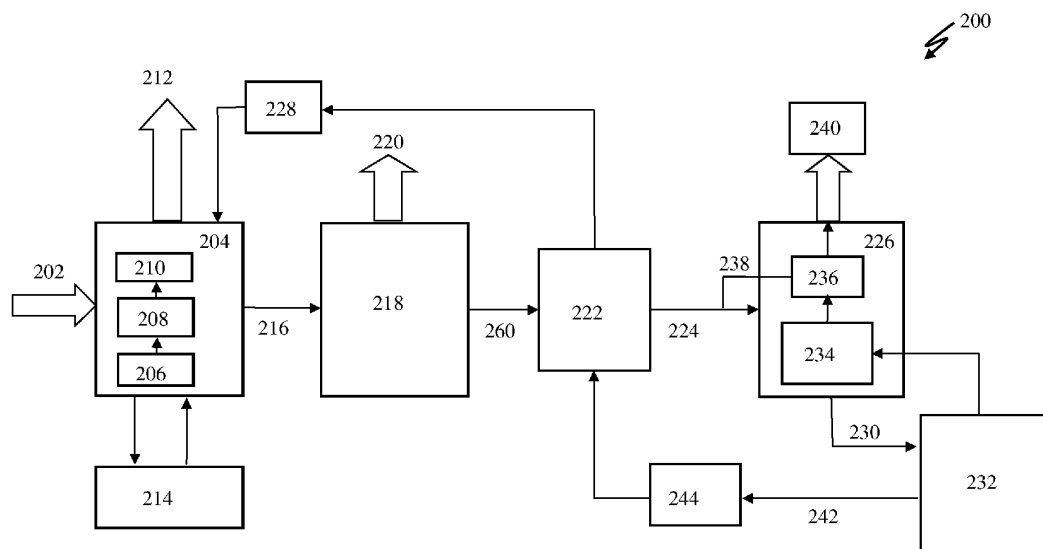


FIG. 2

(57) Abstract: A system and a process for capturing Carbon Dioxide (CO₂) from flue gases are disclosed. The process comprises feeding a flue gas comprising CO₂ to at least one Rotary Packed Bed (RPB) absorber rotating circularly. A solvent may be provided through an inner radius of the RPB absorber. The solvent may move towards an outer radius of the RPB absorber. The solvent may react with the flue gas in a counter-current flow. The process further includes passing the flue gas through at least one of a water wash and an acid wash to remove traces of the solvent present in the flue gas. Finally, the solvent reacted with the CO₂ may be thermally regenerated for re-utilizing the solvent back in the process.

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KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*