

Title (en)

METHOD AND DEVICE FOR RECOVERY OF THERMAL FROM AN EXOTHERMIC CARBON DIOXIDE ABSORPTION PROCESS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ZURÜCKGEWINNUNG VON THERMISCHER ENERGIE IN EINEM EINEM EXOTHERMISCHEN KOHLENDIOXIDABSORPTIONSVERFAHREN

Title (fr)

METHODE ET DISPOSITIF DE RECUPERATION D'ENERGIE THERMIQUE DANS UN PROCEDE D'ABSORPTION DE DIOXYDE DE CARBONE EXOTHERMIQUE

Publication

**EP 1432495 A1 20040630 (EN)**

Application

**EP 02800046 A 20021001**

Priority

- DK 0200650 W 20021001
- DK PA200101439 A 20011002

Abstract (en)

[origin: WO03028854A1] An improved process for recovery of thermal energy from an exothermic absorption process is disclosed; such as a process for recovery of carbon dioxide from a gaseous source e.g. flue gas. In a traditional absorber for carbon dioxide the absorption may be impaired by high temperature in the absorber caused by the reaction energy released by absorption of carbon dioxide to a chemical absorbent such as monoethanol amine. According to the invention the efficiency of the absorption improved by securing that the temperature is lowered in the absorber by insertion of means for transfer of thermal energy in the absorber. This has further the benefit that the released reaction energy may be utilized for example for heating of water for domestic heating. The net benefit of these contributions makes it possible to recover carbon dioxide from flue gas by spending a significant lower amount of energy.

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**B01D 53/14**; **B01D 53/18**; **B01D 53/62**

IPC 8 full level

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CPC (source: EP)

**B01D 53/1418** (2013.01); **B01D 53/1475** (2013.01); **B01D 53/18** (2013.01); **B01D 53/62** (2013.01); **Y02A 50/20** (2017.12); **Y02C 20/40** (2020.08)

Citation (search report)

See references of WO 03028854A1

Citation (examination)

- US 2870868 A 19590127 - BOIS EASTMAN DU, et al
- US 4528002 A 19850709 - LINDE GERHARD [DE]
- US 3266220 A 19660816 - WOERTZ BYRON B

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