Title (en)
METHOD AND MEANS FOR CAPTURE AND LONG-TERM SEQUESTRATION OF CARBON DIOXIDE

Title (de)
VERFAHREN UND MITTEL ZUR ERFASSUNG UND LANGFRISTIGEN SEQUESTRIERUNG VON KOHLENDIOXIDEN

Title (fr)
PROCÉDÉ ET MOYENS POUR LA CAPTURE ET LA SÉQUESTRATION LONGUE DURÉE DE DIOXYDE DE CARBONE

Publication
EP 2214803 A1 20100811 (EN)

Application
EP 08855000 A 20081125

Priority
- US 2008013094 W 20081125
- US 444607 P 20071127
- US 721307 P 20071211

Abstract (en)
[origin: WO2009070273A1] A practical method of recovering CO2 from a mixture of gases, and sequestering the captured CO2 from the atmosphere for geologic time as calcium carbonate and provides a CO2 scrubber for carbon capture and sequestration. The CO2 scrubber incorporates an aqueous froth to maximize liquid-to-gas surface area and time of contact between gaseous CO2 and the calcium hydroxide solution. The CO2 scrubber decreases the temperature of the liquid and the mixed gases, increases ambient pressure on the bubbles and vap pressure inside the bubbles, diffuses the gas through intercellular walls from smaller bubbles with high vapor pressure into larger bubbles with low vapor pressure, and decreases the mean-free-paths of the CO2 molecules inside the bubbles, in order to increase solubilit of CO2 and the rate of dissolution of aseous CO2 from a mixture of ases into the calcium h droxide solution.

IPC 8 full level
B01D 53/14 (2006.01)

CPC (source: EP)
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Citation (search report)
See references of WO 2009070273A1

Designated contracting state (EPC)
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DOCDB simple family (application)
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