

Title (en)

SYSTEM AND METHOD FOR CAPTURING CARBON DIOXIDE FROM AIR

Title (de)

SYSTEM UND VERFAHREN ZUR ERFASSUNG VON KOHLENSTOFFDIOXID AUS DER LUFT

Title (fr)

SYSTÈME ET PROCÉDÉ DE CAPTURE DE DIOXYDE DE CARBONE À PARTIR DE L'AIR

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Application

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Abstract (en)

[origin: WO2017017102A1] The present invention relates to a system (1) for capturing carbon dioxide from ambient air (3), the system comprising: a CO2 trapping structure (4) for placement in ambient air (3), said ambient air (3) comprising carbon dioxide, said CO2 trapping structure (4) comprising a porous member having pores which are interconnected between opposite faces of the member; and an air conducting structure (2) comprising a means for forcing the ambient air (3) through the CO2 trapping structure (4), wherein the CO2 trapping structure (4) is removable positioned with respect to the air conducting structure (2) such that the air passing through the air conducting structure (2) passes through the pores of the CO2 trapping structure (4), said pores having walls comprising an amine which binds the carbon dioxide from the ambient air (3); and a means (5) for moving the CO2 trapping structure (4) to an environment (6) being at a temperature comprised between 60°C to 100°C, preferably between 65°C to 95°C, more preferably between 65°C to 80°C, and being at a reduced pressure so as to release the carbon dioxide from the CO2 trapping structure (4). The use of the system and a related method are provided as well.

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