

Title (en)

METHOD AND DEVICE FOR SEPARATING THE CARBON DIOXIDE FROM A GASEOUS MIXTURE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ABSCHIEDUNG VON KOHLENDIOXID AUS EINEM GASGEMISCH

Title (fr)

PROCÉDÉ ET DISPOSITIF DE SÉPARATION DU DIOXYDE DE CARBONE D'UN MÉLANGE GAZEUX

Publication

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Application

EP 13713469 A 20130301

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Abstract (en)

[origin: WO2013128144A1] The invention relates to a device (110) for separating the carbon dioxide contained in a gaseous mixture (100), said device comprising: a) a membrane electrode assembly forming an electrochemical sub-cell (211) in the form of a solid oxide fuel cell (SOFC) operating in electricity production mode; b) a second membrane electrode assembly forming an electrochemical sub-cell (213) in the form of a molten carbonate fuel cell (MCFC) operating in electrolyser mode; c) a first porous intermediate plate (212) interposed between the first (211) and the second (213) membrane electrode assemblies; d) injection means (602, 321) for injecting the gaseous mixture into said first porous intermediate plate; e) a second porous intermediate plate (214) linked with the second membrane electrode assembly; f) collection means (603, 322) for collecting the carbon dioxide separated from the gaseous mixture on said second porous intermediate plate (212).

IPC 8 full level

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