

Title (en)  
METHOD AND EQUIPMENT FOR TREATING CO<sub>2</sub>-RICH SMOKE

Title (de)  
VERFAHREN UND AUSRÜSTUNG ZUR BEARBEITUNG VON CO<sub>2</sub>-REICHEM RAUCH

Title (fr)  
PROCEDE DE TRAITEMENT DE FUMÉES RICHES EN CO<sub>2</sub>

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Application  
**EP 11712642 A 20110225**

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Abstract (en)  
[origin: WO2011114035A2] The invention relates to a method for treating a gas stream comprising combustion fumes containing CO<sub>2</sub> in an initial proportion, water vapor, one or more volatile acid compounds, and one or more additional impurities selected from among oxygen, nitrogen and argon, comprising the steps of: i) compressing the gas stream to a final pressure of 1 bar to 74 bar absolute; ii) cooling the gas stream to a temperature of around -10 °C to around -130 °C and eliminating at least one additional impurity; and iii) recovering a CO<sub>2</sub>-enriched gas stream containing a final proportion of CO<sub>2</sub> greater than the initial proportion of CO<sub>2</sub> in the stream to be treated. In addition, the method comprises, prior to step i), a step of predrying the stream for removing therefrom at least a portion of the water vapor which it contains. The invention further relates to equipment for implementing the method. The invention can be used for treating oxycombustion fumes.

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