

Title (en)  
METHOD AND SYSTEM FOR PRODUCING METHANE USING METHANOGENIC MICROORGANISMS AND APPLYING SPECIFIC NITROGEN CONCENTRATIONS IN THE LIQUID PHASE

Title (de)  
VERFAHREN UND SYSTEM ZUR HERSTELLUNG VON METHAN MITTELS METHANPRODUZIERENDER MIKROORGANISMEN UND ZUR AUFTRAGUNG SPEZIFISCHER STICKSTOFFKONZENTRATIONEN IN DER FLÜSSIGPHASE

Title (fr)  
PROCÉDÉ ET SYSTÈME DE PRODUCTION DE MÉTHANE À L'AIDE DE MICRO-ORGANISMES MÉTHANOGENÈS ET APPLICATION DE CONCENTRATIONS PRÉCISES D'AZOTE EN PHASE LIQUIDE

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Application  
**EP 14706562 A 20140224**

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Abstract (en)  
[origin: WO2014128300A1] The present invention provides a method and system for producing methane. The method comprises contacting methanogenic microorganisms in a reaction vessel with hydrogen and carbon dioxide, wherein the nitrogen concentration in the liquid phase inside the reaction vessel is in the range of 0.0001 to 35 mmol/L or in the range of 5 to 1000 mmol/L. The invention further provides a system for the method for producing methane comprising at least one bioreactor comprising a reaction vessel suitable for growing, fermenting and/or culturing methanogenic microorganisms, at least one device for providing a gas feed of hydrogen and carbon dioxide into the reaction vessel, and at least one device for measuring the nitrogen concentration in the liquid phase inside the reaction vessel. Further provided is the use of a cell culture comprising methanogenic microorganisms and having a nitrogen concentration in the liquid phase of the cell culture in the range of 0.0001 to 35 mmol/L or in the range of 55 to 1000 mmol/L for producing methane.

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