

Title (en)
USE OF OXYHYDROGEN MICROORGANISMS FOR NON-PHOTOSYNTHETIC CARBON CAPTURE AND CONVERSION OF INORGANIC AND/ OR C1 CARBON SOURCES INTO USEFUL ORGANIC COMPOUNDS

Title (de)
VERWENDUNG VON KNALLGAS-MIKROORGANISMEN ZUR NICHT-PHOTOSYNTHETISCHEN KOHLENSTOFFBINDUNG UND ZUR UMWANDLUNG VON ANORGANISCHEN UND/ODER C1-KOHLENSTOFFQUELLEN IN HILFREICHE ORGANISCHE VERBINDUNGEN

Title (fr)
UTILISATION DE MICROORGANISMES D'OXYHYDROGÉNATION POUR LA CAPTURE DE CARBONE NON PHOTOSYNTHÉTIQUE ET LA CONVERSION DE SOURCES DE CARBONE INORGANIQUE ET/OU CI EN COMPOSÉS ORGANIQUES UTILES

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Abstract (en)
[origin: WO2011139804A2] Compositions and methods for a hybrid biological and chemical process that captures and converts carbon dioxide and/or other forms of inorganic carbon and/or C1 carbon sources including but not limited to carbon monoxide, methane, methanol, formate, or formic acid, and/or mixtures containing C1 chemicals including but not limited to various syngas compositions, into organic chemicals including biofuels or other valuable biomass, chemical, industrial, or pharmaceutical products are provided. The present invention, in certain embodiments, fixes inorganic carbon or C1 carbon sources into longer carbon chain organic chemicals by utilizing microorganisms capable of performing the oxyhydrogen reaction and the autotrophic fixation of CO₂ in one or more steps of the process.

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