

Title (en)
CARBON DIOXIDE-NEUTRAL BIO CONVERTER FACILITIES FOR PRODUCING BIOGAS USING HYDROGEN AND ACTIVATED CARBON COMPOSITIONS IN THE FERMENTATION LIQUID OF THE BIO CONVERTER

Title (de)
KOHLENDIOXIDNEUTRALE BIOKONVERTERANLAGEN ZUR HERSTELLUNG VON BIOGAS MIT WASSERSTOFF UND AKTIVIERTEN KOHLEMASSEN IN DER GÄRFLÜSSIGKEIT DER BIOKONVERTER

Title (fr)
INSTALLATIONS DE BIOCONVERSION NEUTRES EN DIOXYDE DE CARBONE POUR PRODUIRE DU BIOGAZ AU MOYEN D'HYDROGÈNE ET DE MASSES DE CARBONE ACTIVÉES DANS LE LIQUIDE DE FERMENTATION DU BIOCONVERTISSEUR

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Abstract (en)
[origin: CA3185658A1] The invention relates to a carbon dioxide-neutral bio converter facility (BKA) according to figure 1, comprising: - at least one bio converter (BK) for a single-stage or multistage production of biogas (BG) by fermenting biomass (BM) in a fermentation liquid (GF) which is moved using agitation means in the presence of elemental hydrogen, hydrogenotrophic and methanogenic archaea, and activated carbon compositions (K; KM), - an ammonia store (NH3) which, by means of an ammonia line (NH3L), is connected to - an ammonia cracker (AC) for producing hydrogen and nitrogen (H2/N2) by catalytically cracking ammonia, and - a line (LH2/N2) for introducing the generated hydrogen (H2) or the hydrogen-nitrogen mixture (H2/N2) into the at least one bio converter (BK), and/or - a device (VBK) for treating the activated carbon compositions (K; KM) with hydrogen (H2) at a high pressure, comprising a pressure line (25) and an injection lance (28) for injecting the hydrogen-containing carbon compositions (K; KM) into the fermentation liquid (GF), wherein the ammonia is produced using renewable energy, and the ammonia cracker (AC) is operated using the renewable energy. The invention also relates to a conversion method, to a method for injecting hydrogen-containing carbon compositions (H2K; H2KM), and to the use of the fermentation products (KBM).

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