

Title (en)

CHEMOELECTRIC TRANSFORMER, CHEMOELECTRIC TRANSFORMER SYSTEM, METHOD FOR THE PRODUCTION OF ELECTRICAL POWER, AND METHOD FOR OPERATING A CHEMOELECTRIC TRANSFORMER SYSTEM

Title (de)

CHEMOELEKTRISCHER WANDLER, CHEMOELEKTRISCHES WANDLERSYSTEM, VERFAHREN ZUR ERZEUGUNG ELEKTRISCHER ENERGIE UND VERFAHREN ZUM BETRIEB EINES CHEMOELEKTRISCHEN WANDLERSYSTEMS

Title (fr)

CONVERTISSEUR CHIMIO-ELECTRIQUE, SYSTEME DE CONVERTISSEUR CHIMIO-ELECTRIQUE, PROCEDE DE PRODUCTION D'ENERGIE ELECTRIQUE ET PROCEDE POUR FAIRE FONCTIONNER UN SYSTEME DE CONVERTISSEUR CHIMIO-ELECTRIQUE

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Application

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Abstract (en)

[origin: WO03092086A2] The invention relates to a chemoelectric transformer comprising electrodes, which is able to tap electrical power from a liquid hydrogen carrier, particularly an aqueous glucose solution, and oxygen as starting materials via reaction centers and secondary donors or via reaction centers and secondary acceptors. The electrodes are embodied as two porous solid bodies (7, 8) conducting electrons and protons. The volume of the first solid body (7) contains the reaction centers (RZA1, RZA2) and secondary acceptors (A) while the volume of the second solid body (8) contains the reaction centers (RZD1, RZD2) and secondary donors (D) as solid compounds (24). The first and the second solid body (7, 8) are in contact with each other by means of a proton-conducting membrane (6).

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H01M 14/00

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