

Title (en)
PROCESS FOR PRODUCING COMPOUNDS OF THE CXHYOZ TYPE BY REDUCTION OF CARBON DIOXIDE (CO₂) AND/OR CARBON MONOXIDE (CO)

Title (de)
VERFAHREN ZUR HERSTELLUNG VON VERBINDUNGEN DES CXHYOZ-TYPS DURCH REDUKTION VON KOHLENSTOFFDIOXID (CO₂) UND/ODER KOHLENSTOFFMONOXID (CO)

Title (fr)
PROCEDE DE PRODUCTION DE COMPOSES DU TYPE CXHYOZ PAR REDUCTION DE DIOXYDE DE CARBONE (CO₂) ET/OU DE MONOXYDE DE CARBONE (CO)

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Application
EP 09761903 A 20090515

Priority
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Abstract (en)
[origin: WO2009150352A2] The present invention relates to a process for electrolysing steam introduced under pressure into an anode compartment (32) of an electrolyser (30) provided with a proton-conducting membrane (31) made of a material that allows protonated species to be incorporated into this membrane under steam, water injected in steam form being oxidized at the anode (32) so as to generate protonated species in the membrane that migrate within this same membrane and are reduced at the surface of the cathode (33) in the form of reactive hydrogen atoms capable of reducing carbon dioxide and/or carbon monoxide, said process comprising the following steps: injection of CO₂ and/or CO under pressure into the cathode compartment (33) of the electrolyser (30); - reduction of the CO₂ and/or CO injected into the cathode compartment (33) by said reactive hydrogen atoms generated, in such a way that the CO₂ and/or the CO form compounds of the C_xH_yO_z type where x>1, y is between 0 and 2x+2 and z is between 0 and 2x.

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