

Title (en)

METHOD AND PLANT FOR PRODUCING A CARBON-MONOXIDE-RICH GAS PRODUCT

Title (de)

VERFAHREN UND ANLAGE ZUR HERSTELLUNG EINES AN KOHLENSTOFFMONOXIDREICHEN GASPRODUKTS

Title (fr)

PROCÉDÉ ET INSTALLATION POUR LA FABRICATION D'UN PRODUIT GAZEUX RICHE EN MONOXYDE DE CARBONE

Publication

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Application

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Priority

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Abstract (en)

[origin: CA3143870A1] The invention relates to a method for producing a carbon-monoxide-rich gas product (6), in which method at least carbon dioxide is subjected to electrolysis (E), so as to obtain an untreated gas (3) comprising at least carbon monoxide and carbon dioxide, and in which method the untreated gas (3) is subjected to a separation process, which comprises an adsorption (A) and membrane separation (M), so as to obtain a recycling stream (7), which comprises the major part of the carbon dioxide contained in the untreated gas (3), a residual gas (8), and the carbon-monoxide-rich gas product (6), wherein the recycling stream (7) is partially or entirely recirculated to the electrolysis (E), wherein the untreated gas (3) is partially or entirely subjected to the adsorption (A) so as to obtain the recycling stream (7) and an intermediate product stream (5) which is carbon-monoxide-enriched and carbon-dioxide-depleted in relation to the untreated gas (3), and the intermediate product stream (5) is partially or entirely subjected to the membrane separation (M) so as to obtain the gas product (6) and the residual gas (8), wherein the residual gas (8) is partially or entirely recirculated to the adsorption (A). A plant for carrying out such a method is also proposed.

IPC 8 full level

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