

Title (en)

METHOD FOR SEPARATING A GAS MIXTURE WITH A PERMEATION MEMBRANE UNIT

Title (de)

VERFAHREN ZUR TRENNUNG EINER GASMISCHUNG DURCH EINE PERMEATIONSMEMBRAN-EINHEIT

Title (fr)

PROCEDE DE SEPARATION D'UN MELANGE GAZEUX PAR UNE UNITE MEMBRANAIRE DE PERMEATION

Publication

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Application

**EP 02788050 A 20021113**

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Abstract (en)

[origin: FR2832326A1] The invention concerns a method, wherein the gas is derived from a reaction unit (4) and comprises, as main constituents, essentially hydrogen and carbon monoxide. It consists, upstream of the permeation membrane unit (20), in purifying the gas mixture into secondary constituents contained in said mixture to contents less than 100 mole ppm, even to 1 mole ppm, and harmful by accumulation to the separating efficiency of the membrane unit. The invention is applicable to gas mixtures derived from installations (1) for reforming hydrocarbons with steam, for self-generated heat reforming, for CO<sub>2</sub> reforming, for reforming or cracking methanol and/or partial oxidation of compounds containing carbon and hydrogen.

[origin: FR2832326A1] Separation of a gaseous mixture involves using a permeation membrane. The mixture, from a reaction unit, comprises mainly hydrogen and carbon monoxide and impurities, including water, carbon dioxide, methane, nitrogen and/or argon. A purification stage is upstream of the membrane, to reduce the contents of secondary constituents to less than 100 ppm molar. An Independent claim is also included for the installation for use in the above process.

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