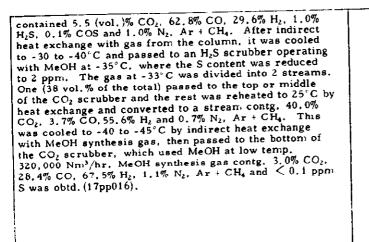
DE 3127706+

E(10-E4E, 31-A, 31-N5) KOPS 14.07.81 15000 K/07 E36 *DE 3127-706 014 KRUPP-KOPPERS GMBH 14.07.81-DE-127706 (10.02.83) C01b-03/52 ADVANTAGES Methanal synthesis gas prodn, from coal gas - by low temp. hydrogen Fine desulphurisation can be omitted. sulphide and carbon ditaxide scrubbing with conversion of partial DETAILS streom The CO2 content of the synthesis gas may be controlled by adjusting the amt, of stripped wash liquor recycled to C83+014577 Prodn. of methanol synthesis gas from the the CO2 scrubber. The desired ratio of the gas componcrude gas from low pressure gasification of coal comprisents $\frac{H_2 - CO_2}{CO + CO_2}$ es H2S scrubbing, conversion and CO2 scrubbing of the gas, in which the compressed gas is divided into sub-streams after the low temp. H2S scrubbing and these are treated may be obtd, by controlling the amt, of gas passed directfurther to different extents. ly from the H2S scrubber to the CO2 scrubber, this stream One stream is passed directly to the top or middle of a being 30-45 vol. % of the total. Before conversion, the gas low temp. CO2 scrubber, whilst the other is converted may be reheated by heat exchange with the compressed after re-heating, then re-cooled and passed into the bottom crude gas and the converted gas re-cooled by heat exchange of the CO2 scrubber. The gas stream obtd. from this with the MeOH synthesis gas from the CO2 scrubber. The scrubber is passed directly to MeOH synthesis without H₂S and CO₂ scrubbers pref. use MeOH at temps, between further desulphurisation. The H2S and CO2 scrubbers are -20 and -60°C. connected by a common scrubbing cycle, the regenerated wash liquor from the H2S scrubber being supplied to the **EXAMPLE** top of the CO2 scrubber, whilst part of the stripped wash 332,000 Nm3/hr gas at 1.1 bar, obtd. by the gasification liquor from the CO2 scrubber is passed to the H2S scrubber of 187 t/hr. coal, was compressed to 38 bar. The gas

and the rest to the top of the CO2 scrubber.



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