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 TEXACO DEV CORP *EP -168-128-A
 09.07.84-US-628934 (15.01.86) C01b-3/50 C10j-3/84
 Synthesis gas generation with prevention of deposit formation - in
 exit lines by provision of a wetted-wall at the mouth and throat of
 outlet conduit
 C86-006273 E(BE DE FR GB IT NL SE)

H(9-C)

is passed through a wetted-wall discharge conduit whereby
 the deposition of solid particles in the conduit is decreased.

ADVANTAGE

The solid content of the exit gases passes through the
 discharge conduit without deposition therein.

EMBODIMENTS

Liq. is sprayed onto the walls of the wetted-wall dis-
 charge conduit and at least onto the entrance portion of the
 wetted-wall discharge conduit.

The wetted-wall portion of the discharge conduit is
 maintained wetted at the inlet end of the discharge conduit
 and for 1-5, pref. 1-3, most pref. about 2, diameters into
 the discharge conduit.

Liq. is admitted to the discharge conduit as a substan-
 tially continuous film, onto the inner surface thereof, pref.
 at the periphery of the mouth at the inlet of the discharge
 conduit and most pref. with an axial component of velocity
 of 150-1500 cm/sec.

QUENCH CHAMBER CONSTRUCTION

Deposition of ash in the outlet conduit (20) of the

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A hot synthesis gas contg. solids is cooled from an initial
 high temp. to a lower final temp. under conditions which
 permit removal of solids from the gas by:

- (a) passing the hot synthesis gas at an initial high
 temp. downwardly through a first contacting zone;
- (b) passing cooling liq. downwardly as a film on the walls
 of the first contacting zone and in contact with the down-
 wardly descending synthesis gas thereby forming a further
 cooled synthesis gas contg. a decreased content of solid
 particles;
- (c) recovering the further cooled synthesis gas contg. a
 decreased content of solid particles; and
- (d) withdrawing the synthesis gas contg. a decreased
 content of solid particles through a discharge conduit.

The process is characterised in that the further cooled
 synthesis gas contg. a decreased content of solid particles

synthesis gas quench chamber is reduced or eliminated by providing a wetted wall (44) at the mouth and throat of the outlet conduit. (24pp1684RIIDwgNo2/5).
(E)ISR: No Search Report.

