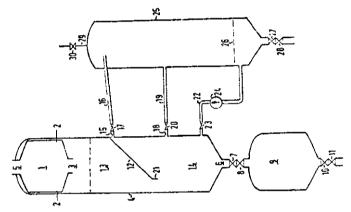
SHEL \star Q73 85-197503/33 \star DE 3403-811-A Mfg. synthesis gas by partial combustion of carbonaceous fuel - in appts. with system for removing floating slag produced in subsequent water quenching bath

SHELL INT RES MIJ BV 03.02.84-DE-403811

E36 H09 J01 (08.08.85) F23i-01/08

03.02.84 as 403811 (1480DH)

Mfr. of synthesis fuel by partial combustion of carbonaceous fuel produces a molten slag which largely drops through an aperture in the reactor base into a water bath (13) where it solidifies. Though most sinks to a base outlet (6) some floats on the water surface. To remove at least most of the floating material, water is first transferred through valved pipes into an adjacent container (25) until level in the main bath is below the lower end of an inclined baffle plate (12) which normally divides the bath into a quenching



zone and a catchment zone. Water is now returned to the main bath and floating solids are trapped under the plate while rising with the water to the level of a discharge pipe (15), pref. inclined somewhat upwards, which takes floating solids into the adjacent container.

ADVANTAGE - Periodic slag removal to prevent floating layer becoming too thick does not involve transfer of entire bath vol., which would put base valve at risk from dropping molten slag. (26pp Dwg.No.1/5)

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