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 TEXACO DEV CORP *BE -892-110
 12.02.81-US-233752 (11.08.82) F22b-01/18 F23c F28d-07
 Cooler for synthesis gas and heat recovery boiler - comprising
 internal and external walls of water, and baffles to direct water and
 heat to appropriate parts of appts.

Cooler for synthesis gas and boiler for recovering lost heat are described in which an outer envelope (11) comprising an entry (12) for the gas and the solid materials which it carries to one end of the envelope; an internal wall of water (15) for the exchange of heat by radiation from the gas to a liquid in the wall of water. An external wall of water (23) inside the envelope and forming a ring (24) with the internal wall of water, an exit (47) for synthesis gas from the ring and appts. (34) to provoke the flow of synthesis gas along the internal wall then into the ring towards the exit.

ADVANTAGE

The structure of the synthesis gas cooler is improved so that it can serve as heat recovery element.

DETAILS

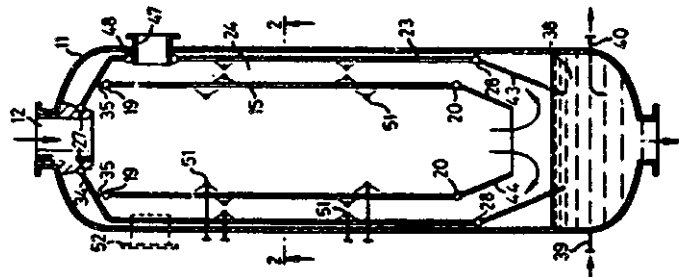
The flow of synthesis gas is provoked by the bonding between the internal and external walls of water adjacent the end closing the ring (24), and by the exit (47) being placed

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next to the end closure of the ring.

The appts. includes liquid means (38) at the other end of the envelope to slake the solid material introduced by the gas. Two chicanes (43, 44) are provided connected resp. to the outer and inner walls at one end to direct the gas flow towards the ring (24) and the slaking mechanism (38) resp. (12pp396).



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