

Title (en)
GASIFICATION REACTOR WITH DOUBLE WALL COOLING

Title (de)
VERGASUNGSREAKTOR MIT DOPPELWANDKÜHLUNG

Title (fr)
RÉACTEUR DE GAZÉIFICATION AVEC REFROIDISSEMENT À DOUBLE PAROI

Publication
EP 2459684 A2 20120606 (DE)

Application
EP 10744500 A 20100716

Priority
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Abstract (en)
[origin: WO2011012231A2] The invention relates to a gasification reactor for producing crude gas containing CO or H₂ by gasification of ash-containing fuel with oxygen-containing gas at temperatures above the fusion temperature of the ash, wherein a reaction chamber, formed by a membrane wall that is flown through by a cooling medium, is provided inside a pressure vessel. Furthermore, a transition area, a quenching chamber and a slag collecting tank downstream thereof in the direction of gravity are provided. The aim of the invention is that a water film which is possibly closed and protects the corresponding sheets can be reached. Said aim is achieved by the fact that, apart from a device (14, 15) forming a water film (16) in the quenching chamber (11), at least a part of the cylinder forming the wall (17) of the quenching chamber has double walls and comprises a coolant overflow (21) for the additional wetting (18) of the inner surface of the quenching chamber wall (17) and a tangential coolant supply (20) in the lower area of the double-walled cylinder (19) which is closed at the base.

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CPC (source: EP KR US)
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