

Title (en)
METHOD FOR PURIFYING THE CRUDE GAS FROM A SOLID MATTER GASIFICATION

Title (de)
VERFAHREN ZUR REINIGUNG DES ROHGASES AUS EINER FESTSTOFFVERGASUNG

Title (fr)
PROCÉDÉ DE PURIFICATION DU GAZ BRUT D'UNE GAZÉIFICATION DE COMBUSTIBLE SOLIDE

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Application
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Abstract (en)
[origin: CA2694584A1] The invention relates to a method and a device for the production and purification of a crude gas for synthesis gas production from a solid fuel containing carbon by a carbon gasification reaction, wherein the fuel is mixed with a quenching medium (7) directly after production in order to remove the high interior energy, and then, either still in the mixing chamber (6) or downstream of the mixing chamber, said fuel is brought into contact with an adsorption agent (8) comprising a solid basic alkaline earth metal compound or a compound containing transitional metals, such that the acidic or basic or sulfurous or halogenated components in the crude gas and arising from the gasification reaction are absorbed. A device (10) that precipitates solid material is located downstream of the supply device for the adsorption agent, by means of which the solid or solidified components are discharged from the system and the basic adsorption agent containing transitional metals may be regenerated and returned to the process. Thus, an energy-intensive cooling of the crude gas in order to purify said crude gas may be omitted, and the synthesis gas thus purified may be used in a subsequent process without additional heating.

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