

Title (en)

Method and plant for producing a clean gas from a hydrocarbon

Title (de)

Methode und Einrichtung zur Herstellung eines Reingases aus einem Kohlenwasserstoff

Title (fr)

Méthode et installation de production d'un gaz propre à partir d'un hydrocarbure

Publication

EP 0976807 A1 20000202 (EN)

Application

EP 98810727 A 19980729

Priority

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Abstract (en)

In a method of producing a clean gas from hydrocarbons, hot air and steam are mixed in a reaction zone with carbonaceous residue, whereby carbon reacts with oxygen to form CO₂ and CO under heat release. Hydrocarbon is added to release moisture and volatile and to have reacted volatile and carbon to CO and H₂, the sulfur of the hydrocarbon being mainly converted into H₂S. A sulfur sorbent is added and is converted into CaO, which CaO reacts with H₂S and COS to solid CaS. At the exit of the reaction carbonaceous residue is separated from the fluid and returned to the reaction zone. The gas is fed into a gas cooler, in which it is cooled by cold solids. The solids consist on one hand of ash being cooled with the air prior to the air entering into the reaction zone and on the other hand of ash and carbonaceous residue filtered out of the reduced gas downstream the gas cooler. The latter solids are size-enlarged prior to their entering the gas cooler. <IMAGE>

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Citation (search report)

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- [A] PATENT ABSTRACTS OF JAPAN vol. 006, no. 015 (C - 089) 28 January 1982 (1982-01-28)

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