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 UNION RHEIN BRAUNKOHLLEN *EP -247-504-A

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Prod'n. of gas contg. hydrogen and carbon mon oxide by fluidised bed - fuel gasification and recycle of sepd. entrained particles to reactor, blockage in recycle line being prevented by pulsating gas injection

C87-143436 R(DE ES GR SE)

Prod'n. of a H₂- and CO contg. gas includes reaction of gasification agents with solid fuels at high pressure in a fluidised bed with, above the bed, a post-gasification space, from which the prod. gas passes to a separator where at least some of the entrained particles are removed. These particles are returned to the fluidised bed reactor via a recycle line, into which gas is injected, at one point or more, to loosen the particles which may tend to form blockages there. The process is characterized by pulsating flow of this injected gas.

USE ADVANTAGE

The process may be used to gasify e.g. predried brown coal, more coalified coals, or peat. The sepd. particles may be returned controllably to the reactor under all conditions. The pulsating flow avoids excessive amts. of gas, which could inter alia reduce the effectiveness of the separator.

H(9-C)

GAS INJECTION

The injected gas may be e.g. CO₂ or recycled prod. gas. It may be injected to the recycle line at various points along its length, with pulsating flow at at least some of the points. For greater effectiveness the pulses at different injection points may be staggered in time, beginning earlier at points nearer the reactor.

The amt. of gas blown in and/or the number of pulses in a given time may be made to depend on the amt. of solid in the recycle line and/or its temp. Each pulse pref. lasts 0.1-2 (esp. about 1) sec., and the gaps between pulses pref. last up to 1 (esp. about 0.1) sec.

APPARATUS

The recycle line pref. contains a number of gas injecting nozzles, at least in its part near the reactor, each with a valve actuated to give pulses as above. (8pp1492CGDwgNo0:1) (G)ISR:No Search Report.

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