

Title (en)
GASIFICATION PROCESS

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EP 0096584 A3 19840905 (EN)

Application
EP 83303287 A 19830607

Priority
US 38594982 A 19820607

Abstract (en)
[origin: EP0096584A2] This invention relates to a process for the gasification of a low quality solid carbonaceous fuel containing bound water such as sub-bituminous coal, lignite, and peat. The process incorporates a Carver-Greenfield dehydration system (12, 34) which removes most of the bound water from the fuel. In one embodiment of the invention, all the fuel is dried in the dehydration system (12) and the dried fuel (14) fed to a slurry preparation apparatus (18) where it is mixed with water to form a fuel slurry (22). The slurry (22) is then fed to a coal gasification plant (24) where it is subjected to partial oxidation using oxygen or air to produce a product gas (28). Dirty water (16) from the dehydration system (12) may be used to form the fuel slurry (22) in the slurry preparation apparatus (18), and low level heat (30) from the gasification plant may be recycled for use in the dehydration system (12). In an alternative embodiment, only a first portion of wet fuel from a store (32) is fed to a Carver-Greenfield dehydration system (34) from which dried fuel is fed direct to the gasification plant (42). A second portion of wet fuel is fed direct from the storage (32) to the plant (42) where the wet and dried fuel blend to provide a feedstock for the plant (42) with a predeterminable water content.

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Citation (search report)
• [YD] US 4166802 A 19790904 - RICHTER GEORGE N [US], et al
• [Y] US 3992784 A 19761123 - VERSCHUUR EKE, et al
• [A] WO 8102303 A1 19810820 - STORA KOPPARBERGS BERGSLAGS AB [SE], et al
• [A] DE 2521132 A1 19761125 - RHEINISCHE BRAUNKOHLNW AG
• [AD] US 3323575 A 19670606 - CHARLES GREENFIELD
• [AD] US 3544291 A 19701201 - SCHLINGER WARREN G, et al

Cited by
EP0677567A1; CN103298918A; AU2012210131B2

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