

Title (en)

A PROCESS FOR MAKING FUEL SLURRIES OF COAL IN WATER AND THE PRODUCT THEREOF

Publication

EP 0050412 B1 19850220 (EN)

Application

EP 81304187 A 19810914

Priority

US 19785380 A 19801017

Abstract (en)

[origin: EP0050412A2] A process for making fluid, stable slurries of finely divided coal in water, which can be sufficiently highly loaded to serve as fuel, comprises: a) Admixing: (i) ultrafine coal particles having a maximum size of 10 μ m MMD in an amount comprising from 10 to 30% by weight of the slurry, (ii) larger coal particles within the size range of from 20 to 200 μ m MMD in an amount sufficient to provide a desired total coal concentration in the slurry, (iii) water, and, (iv) a minor amount of dispersant consisting essentially of an alkaline earth metal salt of an organosulfonate in which the organic moiety is multifunctional, and b) subjecting the mixture to high shear at a rate of at least 100 sec⁻¹. Preferably, calcium lignosulphonate is used as the dispersant and the pH is maintained in the range of 5 to 8 using an inorganic alkali metal buffer salt. The slurry thus produced exhibits thixotropic or Bingham fluid-like properties enabling prolonged periods of storage with subsequent restoration of fluid characteristics to enable use as a fuel.

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C10L 1/32

IPC 8 full level

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CPC (source: EP)

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Cited by

EP0170433A3; US4441889A; EP0089766A1; US4511365A; US4810259A; US4525173A; US4549881A; US4706891A; EP0092353A1; US5028238A; US4722740A; FR2506323A1; FR2538407A1; EP0115718A1; US4610695A; EP0386943A1; US4551179A; US4598873A; US4747548A; US8177867B2; US2014013656A1; US9574151B2; US9701920B2; WO8401387A1; WO8304046A1; EP0149664B1

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