

Title (en)

A process for making fuel slurries of coal in water and the product thereof.

Title (de)

Verfahren zur Herstellung von Kohle-Wasser-Brennstoff Suspensionen und das daraus erhaltene Produkt.

Title (fr)

Procédé pour la préparation d'une suspension de charbon dans l'eau et produit obtenu.

Publication

EP 0050412 A2 19820428 (EN)

Application

EP 81304187 A 19810914

Priority

US 19785380 A 19801017

Abstract (en)

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.

IPC 1-7

C10L 1/32

IPC 8 full level

C10L 1/32 (2006.01); **C10L 10/18** (2006.01); **F23K 1/02** (2006.01)

CPC (source: EP)

C10L 1/326 (2013.01)

Cited by

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

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0050412 A2 19820428; **EP 0050412 A3 19820804**; **EP 0050412 B1 19850220**; AT E11927 T1 19850315; AU 554293 B2 19860814; AU 7543981 A 19820422; CA 1178441 A 19841127; DE 3169061 D1 19850328; IL 63866 A0 19811231; IL 63866 A 19840731; JP S5796090 A 19820615; ZA 816150 B 19820929

DOCDB simple family (application)

EP 81304187 A 19810914; AT 81304187 T 19810914; AU 7543981 A 19810917; CA 387401 A 19811006; DE 3169061 T 19810914; IL 6386681 A 19810917; JP 16495681 A 19811017; ZA 816150 A 19810904