

Title (en)

A PROCESS FOR THE BENEFICIATION OF COAL AND BENEFICIATED COAL PRODUCT

Publication

EP 0032811 B1 19850417 (EN)

Application

EP 81300152 A 19810114

Priority

- US 11435780 A 19800122
- US 11441480 A 19800122

Abstract (en)

[origin: EP0032811A2] An improved beneficiated coal products is disclosed comprising coal particles which have been rendered hydrophobic and oleophilic by forming a polymer coating thereon. According to the process an aqueous slurry containing the coal particles is admixed with a fuel oil and a polymerisation mixture preferably containing one or more long chain carboxylic acids which are polymerised in situ on the coal particles. The hydrophobic coal particles are then separated from the aqueous medium by froth flotation preferably in several steps by atomising the flocculated coal particles onto the surface of a mass of wash water. Hydrophilic ash particles separate into the wash water whilst the flocculated hydrophobic, oleophilic coal particles are recovered. Following recovery the flocculated particles are de-watered mechanically. Additional but optional treatments include neutralisation and admixing with oil to form coal-in-oil mixtures, and subjecting the particles to a second graft polymerisation procedure.

IPC 1-7

C10L 9/10; B03D 1/00

IPC 8 full level

B03B 9/00 (2006.01); **B03D 1/00** (2006.01); **B03D 3/06** (2006.01); **C10L 1/32** (2006.01); **C10L 9/10** (2006.01)

CPC (source: EP)

B03B 9/005 (2013.01); **B03D 1/00** (2013.01); **B03D 3/06** (2013.01); **C10L 1/322** (2013.01); **C10L 9/10** (2013.01)

Cited by

EP0219569A1; EP0725128A3; EP3112445A4; EP0057575A3; EP1668097A4; CN112973952A; CN113372973A; US10072226B2; EP0057577B1

Designated contracting state (EPC)

AT BE DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0032811 A2 19810729; EP 0032811 A3 19811014; EP 0032811 B1 19850417; DE 3169930 D1 19850523; GB 2068410 A 19810812; PL 136658 B1 19860331; PL 142354 B1 19871031; PL 229301 A1 19810918

DOCDB simple family (application)

EP 81300152 A 19810114; DE 3169930 T 19810114; GB 8101031 A 19810114; PL 22930181 A 19810121; PL 24677281 A 19810121