

Title (en)

METHOD FOR AGGLOMERATING INDUSTRIAL DUST, IN PARTICULAR USING A BRIQUETTING TECHNIQUE

Title (de)

VERFAHREN ZUM AGGLOMERIEREN VON INDUSTRIESTAUB, INSBESONDERE UNTER VERWENDUNG EINER BRIKETTIERTECHNIK

Title (fr)

PROCÉDÉ D'AGGLOMÉRATION DE POUSSIÈRES INDUSTRIELLES, EN PARTICULIER PAR TECHNIQUE DE BRIQUETAGE

Publication

EP 2358917 B1 20140108 (FR)

Application

EP 09768125 A 20091102

Priority

- FR 2009052111 W 20091102
- FR 0857906 A 20081121

Abstract (en)

[origin: FR2930265A1] The process comprises mixing the dust in a tank in the presence of a first binder comprising a polymer (5-20 wt.%) of molecular weight higher than 500000 g/mol, separately adding a second binder comprising silicate (5-40 wt.%) in the tank, and compacting the obtained agglomerates. The first binder is present in the form of an inverse emulsion. The organic polymer is water soluble, has an ionicity of 10-90 mol.%, and comprises an ionic, cationic, zwitterionic and/or anionic monomer, a nonionic monomer and optionally 0.02-2 mol.% of hydrophobic monomer. The process comprises mixing the dust in a tank in the presence of a first binder comprising a polymer (5-20 wt.%) of molecular weight higher than 500000 g/mol, separately adding a second binder comprising silicate (5-40 wt.%) in the tank, and compacting the obtained agglomerates. The first binder is present in the form of an inverse emulsion. The organic polymer is water soluble, has an ionicity of 10-90 mol.%, and comprises an ionic, cationic, zwitterionic and/or anionic monomer, a nonionic monomer and optionally 0.02-2 mol.% of hydrophobic monomer. The weight ratio of dry polymer to oil of the inverse emulsion is 0.5. The ratio of polymer in inverse emulsion to dust is 0.2-0.5 wt.%.

IPC 8 full level

C22B 1/242 (2006.01); **C22B 1/243** (2006.01); **C22B 1/244** (2006.01)

CPC (source: EP KR US)

C22B 1/242 (2013.01 - EP KR US); **C22B 1/243** (2013.01 - EP US); **C22B 1/244** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

FR 2930265 A1 20091023; **FR 2930265 B1 20120406**; BR PI0920438 A2 20151222; CA 2739406 A1 20100527; CN 102177263 A 20110907; CN 102177263 B 20140702; EA 201170432 A1 20110830; EP 2358917 A1 20110824; EP 2358917 B1 20140108; ES 2442275 T3 20140210; JP 2012509167 A 20120419; KR 20110098895 A 20110902; US 2011209582 A1 20110901; US 8409322 B2 20130402; WO 2010058111 A1 20100527; ZA 201102079 B 20120530

DOCDB simple family (application)

FR 0857906 A 20081121; BR PI0920438 A 20091102; CA 2739406 A 20091102; CN 200980139839 A 20091102; EA 201170432 A 20091102; EP 09768125 A 20091102; ES 09768125 T 20091102; FR 2009052111 W 20091102; JP 2011536923 A 20091102; KR 20117007577 A 20091102; US 200913122197 A 20091102; ZA 201102079 A 20110318