

Title (en)

MULTI-SUBSTANCE MIXTURES BASED ON WATER-SOLUBLE ALKALI SILICATE COMPOUNDS AND THEIR USE

Title (de)

MEHRSTOFFGEMISCHE AUF BASIS WASSERLÖSLICHER ALKALISILIKATVERBINDUNGEN UND IHRE VERWENDUNG

Title (fr)

MELANGES COMPLEXES A BASE DE COMPOSES DE SILICATE ALCALIN HYDROSOLUBLES ET LEUR UTILISATION

Publication

EP 0748369 B1 19990929 (DE)

Application

EP 95911243 A 19950220

Priority

- DE 4406592 A 19940301
- EP 9500604 W 19950220

Abstract (en)

[origin: US5814597A] PCT No. PCT/EP95/00604 Sec. 371 Date Oct. 10, 1996 Sec. 102(e) Date Oct. 10, 1996 PCT Filed Feb. 20, 1995 PCT Pub. No. WO95/23841 PCT Pub. Date Sep. 8, 1995The invention relates to a solid material (primary drying product) containing alkali metal silicate with a modulus (molar ratio of SiO₂ to M₂O, M=alkali metal) of 0.8 to 4 in homogeneous admixture with other inorganic and/or organic useful materials and/or auxiliaries, which has been dried from a finely sprayed aqueous preparation of mixtures of the alkali metal silicates and the inorganic and/or organic useful materials and/or auxiliaries by means of a hot gas stream. The solid material according to the invention is characterized in that, as a primary drying product in homogeneous admixture with the alkali metal silicate, it contains at least 10% by weight of water-soluble inorganic and/or organic salts, has apparent densities of at least 150 g/l, possesses a microporous absorbent internal structure and has been dried with superheated steam as the hot gas stream. The invention also relates in particular to detergent builder systems based on multicomponent systems containing this overdried alkali metal silicate and to their use for subsequent impregnation with other free-flowing useful materials and mixtures thereof from the field of detergents and to the detergents obtained.

IPC 1-7

C11D 3/08; C11D 11/02; C11D 11/00

IPC 8 full level

C01B 33/32 (2006.01); **C11D 3/02** (2006.01); **C11D 3/06** (2006.01); **C11D 3/08** (2006.01); **C11D 3/10** (2006.01); **C11D 3/20** (2006.01); **C11D 3/37** (2006.01); **C11D 11/00** (2006.01); **C11D 11/02** (2006.01)

CPC (source: EP US)

C11D 3/046 (2013.01 - EP US); **C11D 3/06** (2013.01 - EP US); **C11D 3/08** (2013.01 - EP US); **C11D 3/10** (2013.01 - EP US); **C11D 3/2075** (2013.01 - EP US); **C11D 3/3761** (2013.01 - EP US); **C11D 11/0082** (2013.01 - EP US); **C11D 11/02** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE DE ES FR GB IT NL

DOCDB simple family (publication)

US 5814597 A 19980929; AT E185164 T1 19991015; CN 1140466 A 19970115; DE 4406592 A1 19950907; DE 59506956 D1 19991104; EP 0748369 A1 19961218; EP 0748369 B1 19990929; ES 2138192 T3 20000101; JP H09509641 A 19970930; WO 9523841 A1 19950908

DOCDB simple family (application)

US 70048596 A 19961010; AT 95911243 T 19950220; CN 95191607 A 19950220; DE 4406592 A 19940301; DE 59506956 T 19950220; EP 9500604 W 19950220; EP 95911243 A 19950220; ES 95911243 T 19950220; JP 52266195 A 19950220