

Title (en)

Process for the preparation of free-flowing alkaline detergents by compacting granulation.

Title (de)

Verfahren zur Herstellung von rieselfähigen alkalischen Reinigungsmitteln durch kompaktierende Granulation.

Title (fr)

Procédé de préparation de compositions détergentes alcalines s'écoulant librement par granulation compactante.

Publication

EP 0253323 B2 19940302 (DE)

Application

EP 87109974 A 19870710

Priority

- DE 3624336 A 19860718
- DE 3709488 A 19870323

Abstract (en)

[origin: US4834902A] To produce granular, free-flowing detergents containing sodium metasilicate, pentasodium triphosphate or zeolite NaA or a triphosphate/zeolite mixture, at least two of the components are first agglomerated and mixed as a granular preagglominate with other components present in powder form and compacted by means of rolls, the pressure limit beyond which no further compaction is obtained not being significantly exceeded. The compactate is then size-reduced to the desired particle size.

IPC 1-7

C11D 17/06; C11D 3/08; C11D 3/06; C11D 3/12

IPC 8 full level

C11D 3/60 (2006.01); **C11D 3/06** (2006.01); **C11D 3/08** (2006.01); **C11D 3/12** (2006.01); **C11D 11/00** (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP US)

C11D 3/06 (2013.01 - EP US); **C11D 3/08** (2013.01 - EP US); **C11D 3/128** (2013.01 - EP US); **C11D 11/00** (2013.01 - EP US);
C11D 17/065 (2013.01 - EP US)

Cited by

US5540855A; EP0377302A3; US5807529A; US5045238A; EP0283885A3; US4834902A; WO0039260A1; WO9506708A1; WO9506707A1;
EP0581895B1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)

US 4834902 A 19890530; DE 3624336 A1 19880128; DE 3709488 A1 19881006; EP 0253323 A2 19880120; EP 0253323 A3 19880817;
EP 0253323 B1 19910424; EP 0253323 B2 19940302; EP 0283885 A2 19880928; EP 0283885 A3 19890726; EP 0283885 B1 19920513;
ES 2021641 B3 19911116; ES 2030780 T3 19921116; JP S6333500 A 19880213

DOCDB simple family (application)

US 17160988 A 19880322; DE 3624336 A 19860718; DE 3709488 A 19870323; EP 87109974 A 19870710; EP 88103981 A 19880314;
ES 87109974 T 19870710; ES 88103981 T 19880314; JP 17987087 A 19870717