

Title (en)

PROCESS FOR PRODUCING GRANULATED PRECURSORS OF LOW ALKALINITY DETERGENTS

Title (de)

VERFAHREN ZUR HERSTELLUNG GRANULARER VORPRODUKTE NIEDERALKALISCHER REINIGUNGSMITTEL

Title (fr)

PROCEDE DE PREPARATION DE PRODUITS GRANULES PRECURSEURS DE DETERGENTS DE FAIBLE ALCALINITE

Publication

**EP 0848750 B1 19991110 (DE)**

Application

**EP 96930091 A 19960823**

Priority

- DE 19532304 A 19950901
- EP 9603730 W 19960823

Abstract (en)

[origin: DE19532304A1] A process is disclosed for producing granulated precursors of low alkalinity detergents for dish-washing machines that consist of alkaline metal salts of carboxylic acid and organic polycarboxylic acids, so as to counteract the segregating tendency of the finished product. For that purpose, a partial amount of polycarboxylic acid salts is prepared in the usual way, then alkaline carbonate is reacted with the free polycarboxylic acids and their salts, and alkaline hydrocarbonate, at temperatures below 60 DEG C and in the presence of 2 to 12 % by weight water and the alkaline metal salts of the polycarboxylic acids.

IPC 1-7

**C11D 7/12**; **C11D 3/10**; **C11D 7/26**; **C11D 3/20**; **C11D 11/04**

IPC 8 full level

**C11D 1/825** (2006.01); **C11D 3/10** (2006.01); **C11D 3/20** (2006.01); **C11D 7/12** (2006.01); **C11D 7/26** (2006.01); **C11D 11/04** (2006.01); **C11D 17/00** (2006.01); **C11D 1/66** (2006.01); **C11D 1/72** (2006.01)

CPC (source: EP)

**C11D 1/8255** (2013.01); **C11D 3/10** (2013.01); **C11D 3/2086** (2013.01); **C11D 17/0091** (2013.01); **C11D 1/662** (2013.01); **C11D 1/72** (2013.01)

Designated contracting state (EPC)

BE DE ES FR IT

DOCDB simple family (publication)

**DE 19532304 A1 19970306**; DE 59603641 D1 19991216; EP 0848750 A1 19980624; EP 0848750 B1 19991110; ES 2140894 T3 20000301; WO 9709411 A1 19970313

DOCDB simple family (application)

**DE 19532304 A 19950901**; DE 59603641 T 19960823; EP 9603730 W 19960823; EP 96930091 A 19960823; ES 96930091 T 19960823