

Title (en)

Zeolite based spray-dried detergent compositions and process for preparing same.

Title (de)

Sprühgetrocknete Waschmittelzusammensetzungen auf Zeolithbasis und Verfahren zur deren Herstellung.

Title (fr)

Compositions détergentes à base de zéolithe séchées par pulvérisation.

Publication

**EP 0520582 A1 19921230 (EN)**

Application

**EP 92201881 A 19920624**

Priority

US 72314691 A 19910628

Abstract (en)

A process for producing a free-flowing, zeolite-containing spray-dried particulate detergent composition is described, said detergent composition having improved particle mechanical strength and integrity concomitant with high solubility characteristics such that the amount of visible residue deposited on fabrics laundered with such detergent composition is significantly minimized comprising the steps of: (a) forming an aqueous crutcher slurry containing (i) at least about 5%, by weight, of a zeolite; (ii) an effective amount of a defined bead strengthening agent; and (iii) from about 0 to 50%, by weight, of a supplementary detergent builder; said crutcher slurry being essentially free of sodium silicate and bentonite and containing less than about 3%, by weight, of anionic and/or nonionic surface active detergent compounds, all percentages being based on the solids content of the slurry, in the absence of water; (b) spray-drying the crutcher slurry of step (a) to produce spray-dried particles; and (c) applying one or more anionic, nonionic and/or cationic surface active detergent compounds to the spray-dried particles. d

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Citation (search report)

- [X] EP 0191187 A2 19860820 - DEGUSSA [DE]
- [Y] EP 0344629 A1 19891206 - HENKEL KGAA [DE]
- [Y] EP 0313144 A2 19890426 - UNILEVER NV [NL], et al
- [A] EP 0319053 A2 19890607 - UNILEVER NV [NL], et al
- [AD] EP 0001853 A1 19790516 - PROCTER & GAMBLE [US]

Cited by

EP2787064A3; US5962397A; GB2315768A; EP0763594A1; EP1215277A1; KR100456508B1; EP3301153A1; CN109790489A; US10676703B2; EP3546556A1; CN111742040A; US6894019B2; US11505768B2; WO2009115380A1; WO2018067494A1; WO2019191172A1; WO0077158A1; EP0969082B2

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