

Title (en)

Formation of discrete, high active detergent granules using a continuous neutralization system.

Title (de)

Bildung von diskreten hochaktiven Detergenskörnern bei einem kontinuierlichen Neutralisationssystem.

Title (fr)

Formation de granules de détergent discrets à haute activité utilisant un système de neutralisation continu.

Publication

**EP 0402112 A2 19901212 (EN)**

Application

**EP 90306139 A 19900606**

Priority

US 36472189 A 19890609

Abstract (en)

A process for making discrete, high active detergent particles by: (a) reacting in a continuous neutralization system alkyl sulfuric acid and/or alkyl benzene sulfonic acid with an alkali metal hydroxide solution, (b) adding to the system polyethylene glycol of molecular weight about 4,000-50,000 and/or certain ethoxylated nonionic surfactants, and (c) forming detergent particles. The alkali metal hydroxide solution is greater than or equal to about 62% by weight of the hydroxide, and the neutralized product has less than or equal to about 12% by weight of water. Granular detergent compositions containing the detergent granules are also described.

IPC 1-7

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IPC 8 full level

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CPC (source: EP KR)

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Cited by

US5665692A; US5574005A; US5723433A; US5451354A; US5935923A; US6140302A; US5486317A; JP2016536411A; US5703037A; US5516447A; US6058623A; US5641741A; US5637560A; US5739097A; CN1042746C; US5998357A; US6025320A; US6077820A; US5646107A; USRE37949E; WO9840461A1; WO9302176A1; US7186677B2; US6468957B1; EP1163318A1; EP0403148B1; WO9629390A1; WO9302168A1; WO9201778A1; WO9831780A1; WO9529215A1; EP0777720B2; EP0682691B2

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