

Title (en)

Process for making detergent granules by neutralisation of sulphonic acids.

Title (de)

Verfahren zur Herstellung von Detergengkörnchen durch Neutralisation von Sulfonsäuren.

Title (fr)

Procédé pour la production de granules de détergent par neutralisation des acides sulfoniques.

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Application

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Priority

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Abstract (en)

The present invention relates to a process for making a detergent particle by neutralisation of the acid form of an anionic surfactant in a high shear mixer by a stoichiometric excess of finely divided particulate neutralising agent having an average particle size of less than 5 μ m. The present invention also encompasses free-flowing detergent compositions made with the process.

IPC 1-7

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CPC (source: EP)

C11D 11/04 (2013.01); **C11D 17/065** (2013.01)

Citation (search report)

- [A] GB 1404317 A 19750828 - BELL CHEMICALS PTY LTD
- [A] EP 0352135 B1 19940928 - UNILEVER PLC [GB], et al
- [AD] EP 0420317 A1 19910403 - UNILEVER NV [NL], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 15, no. 38 (C-800)30 January 1991

Cited by

DE10163603B4; CN1116400C; US6133223A; US6992055B1; EP0936269A4; US6056905A; DE10160319A1; DE10160319B4; DE10232304A1; DE10232304B4; EP0853117A1; EP0623593A3; US5641741A; AU702856B2; US6518233B2; US6207635B1; USRE37949E; WO2004053046A1; WO03054131A1; WO9732003A1; WO9914308A1; WO0224855A1; WO9606917A1; US6514930B2; US6518234B2; US7186677B2; US6369015B1; US6468957B1; US7053038B2; US6274544B1; US6429184B1; WO0224854A1; WO0032738A1; WO9900475A1

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DOCDB simple family (application)

EP 92870026 A 19920214; AU 3595593 A 19930127; CA 2130007 A 19930127; CN 93101600 A 19930213; DE 69220773 T 19920214; EG 20893 D 19930211; ES 92870026 T 19920214; JP 51410093 A 19930127; MA 23088 A 19930212; MX 9300770 A 19930212; MY PI9300204 A 19930210; PH 45691 A 19930208; TR 9393 A 19930128; US 9300736 W 19930127