

Title (en)
Washing agent containing citric acid

Title (de)
Citronensäurehaltiges Waschmittel

Title (fr)
Agent de lavage comprenant de l'acide citrique

Publication
EP 1004658 A3 20000809 (DE)

Application
EP 99122631 A 19991113

Priority
DE 19854083 A 19981124

Abstract (en)
[origin: EP1004658A2] The stain removal properties of washing agents with a bleach content of less than 10 wt. % are improved by incorporation of citric acid and another organic acid in a mixture of coarse and fine grains. A washing agent with less than 10 wt. % bleaching agent contains citric acid as separate or subsequently added component to promote the removal of bleachable stains. The citric acid has a particle size distribution such that at least 80 wt. % of the particles have a size of 1500-2000 μm. As well as the coarse grain citric acid, an additional organic acid (I), which is also a separate or subsequently added component, is present. (I) has a particle size distribution such that at least 80 wt.% of the particles have a size of less than 450 μm. Anionic and/or nonionic detergents and builders are also present. 10-30 wt. % of the total acid particles have a size of 1750-2000 μm and 10-30 wt. % have a size of less than 150 μm.

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C11D 3/39; C11D 3/395; C11D 3/20; C11D 17/06

IPC 8 full level
C11D 3/20 (2006.01); **C11D 3/39** (2006.01); **C11D 3/395** (2006.01)

CPC (source: EP)
C11D 3/2086 (2013.01); **C11D 3/39** (2013.01); **C11D 3/395** (2013.01)

Citation (search report)
• [PX] DE 19723616 A1 19981210 - HENKEL KGAA [DE]
• [DA] EP 0534525 A2 19930331 - UNILEVER NV [NL], et al
• [A] EP 0866118 A2 19980923 - PROCTER & GAMBLE [US]

Cited by
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Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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