

Title (en)
DETERGENT

Title (de)
REINIGUNGSMITTEL

Title (fr)
DÉTERGENTS

Publication
EP 2118254 A1 20091118 (DE)

Application
EP 07847825 A 20071205

Priority
• EP 2007063328 W 20071205
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Abstract (en)
[origin: US2010031976A1] Phosphate-free automatic dishwashing agents containing a) citrate, b) sodium percarbonate, c) nonionic surfactant, d) copolymer encompassing i) monomers from the group of the mono- or polyunsaturated carboxylic acids, ii) monomers of the general formula R1(R2)C-C(R3)-X-R4, in which R1 to R3, mutually independently, denote -H, -CH3, or -C2H5, X denotes an optionally present spacer group that is selected from -CH2-, -C(O)O-, and -C(O)-NH-, and R4 denotes a straight-chain or branched saturated alkyl residue having 2 to 22 carbon atoms or an unsaturated, preferably aromatic residue having 6 to 22 carbon atoms, e) 0.05 to 1 wt % methylglycinediacetic acid, are notable for washing and rinsing results that are comparable or even superior to those of phosphate-containing automatic dishwashing agents.

IPC 8 full level
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CPC (source: EP US)
C11D 3/2086 (2013.01 - EP US); **C11D 3/33** (2013.01 - EP US); **C11D 3/3757** (2013.01 - EP US); **C11D 3/378** (2013.01 - EP US); **C11D 3/3942** (2013.01 - EP US)

Citation (search report)
See references of WO 2008095562A1

Cited by
WO2013056996A1; US8574374B2; WO2014161786A1; US9994797B2

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