

Title (en)

Use of soil release polymer in fabric treatment compositions

Title (de)

Verwendung eines schmutzlösenden Polymers in Stoffbehandlungszusammensetzungen

Title (fr)

Utilisation d'un polymère de libération de salissures dans des compositions de traitement des tissus

Publication

EP 2135931 A1 20091223 (EN)

Application

EP 08158306 A 20080616

Priority

EP 08158306 A 20080616

Abstract (en)

Use of a fabric treatment composition comprising a polymeric soil release agent for promoting repellency of allergens from textiles. Method for repelling allergen from textiles by contacting the textile with a fabric treatment composition containing the soil release polymer.

IPC 8 full level

C11D 3/00 (2006.01); **C11D 3/37** (2006.01); **D06M 15/333** (2006.01); **D06M 15/507** (2006.01); **D06M 15/53** (2006.01); **D06M 15/59** (2006.01); **D06M 16/00** (2006.01)

CPC (source: EP)

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Citation (applicant)

- US 4702857 A 19871027 - GOSSELINK EUGENE P [US]
- EP 0707627 A1 19960424 - PROCTER & GAMBLE [US]
- EP 0991743 A1 20000412 - CLARIANT GMBH [DE]
- US 7087572 B2 20060808 - HUBIG STEPHAN M [US], et al
- US 4956447 A 19900911 - GOSSELINK EUGENE P [US], et al
- US 4968451 A 19901106 - SCHEIBEL JEFFREY J [US], et al
- US 4711730 A 19871208 - GOSSELINK EUGENE P [US], et al
- US 4721580 A 19880126 - GOSSELINK EUGENE P [US]
- US 4877896 A 19891031 - MALDONADO RENE [US], et al
- US 3959230 A 19760525 - HAYS HUGH ROBERT
- US 3893929 A 19750708 - BASADUR MARINO S
- US 4000093 A 19761228 - NICOL CHARLES HENRY, et al
- EP 0219048 A2 19870422 - BASF AG [DE]
- US 5415807 A 19950516 - GOSSELINK EUGENE P [US], et al
- US 4201824 A 19800506 - LAGASSE ALAIN [FR], et al
- US 4240918 A 19801223 - LAGASSE ALAIN [FR], et al
- US 4525524 A 19850625 - TUNG WILLIAM C T [US], et al
- US 4579681 A 19860401 - RUPPERT RONALD M [US], et al
- EP 0279134 A1 19880824 - RHONE POULENC CHIMIE [FR]
- EP 0457205 A2 19911121 - BASF AG [DE]
- DE 233504 C 19110411
- US 4787989 A 19881129 - FANELLI JOSEPH J [US], et al
- US 5576282 A 19961119 - MIRACLE GREGORY S [US], et al
- US 6306812 B1 20011023 - PERKINS CHRISTOPHER MARK [US], et al
- US 6326348 B1 20011204 - VINSON PHILLIP KYLE [US], et al
- US 2220099 A 19401105 - FRITZ GUENTHER, et al
- US 2477383 A 19490726 - LEWIS ALLEN H
- US 6020303 A 20000201 - CRIPE THOMAS ANTHONY [US], et al
- US 6060443 A 20000509 - CRIPE THOMAS ANTHONY [US], et al
- US 6008181 A 19991228 - CRIPE THOMAS ANTHONY [US], et al
- WO 9905243 A1 19990204 - PROCTER & GAMBLE [US], et al
- WO 9905242 A1 19990204 - PROCTER & GAMBLE [US], et al
- WO 9905244 A1 19990204 - PROCTER & GAMBLE [US], et al
- WO 9905082 A1 19990204 - PROCTER & GAMBLE [US], et al
- WO 9905084 A1 19990204 - PROCTER & GAMBLE [US], et al
- WO 9905241 A1 19990204 - PROCTER & GAMBLE [US], et al
- WO 9907656 A2 19990218 - PROCTER & GAMBLE [US], et al
- WO 0023549 A1 20000427 - PROCTER & GAMBLE [US], et al
- WO 0023548 A1 20000427 - PROCTER & GAMBLE [US], et al
- US 6150322 A 20001121 - SINGLETON DAVID M [US], et al
- US 6153577 A 20001128 - CRIPE THOMAS ANTHONY [US], et al
- US 6093856 A 20000725 - CRIPE THOMAS ANTHONY [US], et al
- US 4565647 A 19860121 - LLENADO RAMON A [US]
- US 4483780 A 19841120 - LLENADO RAMON A [US]
- US 4483779 A 19841120 - LLENADO RAMON A [US], et al
- US 5332528 A 19940726 - PAN ROBERT Y [US], et al
- WO 9206162 A1 19920416 - PROCTER & GAMBLE [US]
- WO 9319146 A1 19930930 - PROCTER & GAMBLE [US]
- WO 9319038 A1 19930930 - PROCTER & GAMBLE [US]
- WO 9409099 A1 19940428 - PROCTER & GAMBLE [US], et al
- US 6482994 B2 20021119 - SCHEPER WILLIAM MICHAEL [US], et al
- WO 0142408 A2 20010614 - PROCTER & GAMBLE [US]

- US 6136769 A 20001024 - ASANO KAORI [JP], et al
- WO 9835002 A1 19980813 - PROCTER & GAMBLE [US], et al
- WO 9835003 A1 19980813 - PROCTER & GAMBLE [US], et al
- WO 9835004 A1 19980813 - PROCTER & GAMBLE [US], et al
- WO 9835005 A1 19980813 - PROCTER & GAMBLE [US], et al
- WO 9835006 A1 19980813 - PROCTER & GAMBLE [US], et al
- US 4228042 A 19801014 - LETTON JAMES C
- US 4239660 A 19801216 - KINGRY GARY W [JP]
- US 4260529 A 19810407 - LETTON JAMES C
- US 6022844 A 20000208 - BAILLELY GERARD MARCEL [GB], et al
- US 6221825 B1 20010424 - WILLIAMS JR JOHNNY [US], et al
- WO 0047708 A1 20000817 - PROCTER & GAMBLE [US], et al
- US 3929678 A 19751230 - LAUGHLIN ROBERT GENE, et al
- US 3812044 A 19740521 - CONNOR D, et al
- US 4704233 A 19871103 - HARTMAN FREDERICK A [US], et al
- US 4790856 A 19881213 - WIXON HAROLD E [US]
- US 3646015 A 19720229 - HAMILTON LEWIS R
- EP 0251446 A2 19880107 - GENENTECH INC [US]
- WO 9526397 A1 19951005 - NOVO NORDISK AS [DK], et al
- WO 9623873 A1 19960808 - NOVO NORDISK AS [DK], et al
- US 4537706 A 19850827 - SEVERSON JR ROLAND G [US]
- US 4489455 A 19841225 - SPENDEL WOLFGANG U [US]
- US 4489574 A 19841225 - SPENDEL WOLFGANG U [US]
- US 2954347 A 19600927 - ST JOHN WAYNE L, et al
- US 4265779 A 19810505 - GANDOLFO DANIEL, et al
- EP 0354016 A2 19900207 - DOW CORNING [US]
- US 4062647 A 19771213 - STORM THOMAS D, et al
- US 4375416 A 19830301 - CRISP PETER N [GB], et al
- US 4291071 A 19810922 - HARRIS RICHARD G, et al
- KUO-YANN LAI, LIQUID DETERGENTS, pages 278 - 279
- M. ZAHRADNIK: "The Production and Application of Fluorescent Brightening Agents", 1982, JOHN WILEY & SONS
- "Kirk Othmer Encyclopedia of Chemical Technology", vol. 7, 1979, JOHN WILEY & SONS, INC., pages: 430 - 447

Citation (search report)

- [X] US 2004213997 A1 20041028 - BONASTRE GILABERT NURIA [ES], et al
- [X] US 6153723 A 20001128 - LANG FRANK-PETER [DE], et al
- [X] US 6200351 B1 20010313 - SCHLEINIG CHRIS [DE], et al
- [X] US 4007305 A 19770208 - KAKAR SARWAN K, et al
- [X] O'LENICK A J: "SOIL RELEASE POLYMERS", 1 October 1999, JOURNAL OF SURFACTANTS AND DETERGENTS, SPRINGER, BERLIN, DE, PAGE(S) 553 - 557, ISSN: 1097-3958, XP000893935

Cited by

JP2015527446A; CN103347928A; AU2012213597A8; AU2012213597B2; CN111868222A; US9732308B2; WO2012104157A1; WO2012104158A1; EP3327106A1; US9365806B2; US9890350B2; US10377979B2; EP3327108A1; US11814607B2; WO2012104159A1; WO2014019903A1; WO2019166277A1; WO2012104156A1; EP3272850A1; US10808206B2; US12030984B2; EP3759206B1

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