

Title (en)
METHOD OF REMOVING STAINS FROM A SURFACE

Title (de)
VERFAHREN ZUR ENTFERNUNG VON FLECKEN AUF OBERFLÄCHEN

Title (fr)
PROCEDE D'ELIMINATION DE TACHES SUR UNE SURFACE

Publication
EP 1155107 A1 20011121 (EN)

Application
EP 00907252 A 20000210

Priority
• US 0003454 W 20000210
• US 12117499 P 19990222

Abstract (en)
[origin: WO0050552A1] A method for removing stains from a hydrophobic surface such as plastic, including the steps of applying an aqueous solution of a composition which comprises: (a) from 0.1% to 15% by weight of the composition of an amine oxide, phosphine oxide, sulfoxide or mixtures thereof; (b) from 0.1% to 15% by weight of the composition of one or more low cloud point nonionic surfactants having a cloud point of less than 30 DEG C, selected from ethoxylated-propoxylated alcohol, capped poly(oxyalkylated) alcohols and mixtures thereof, wherein said capped nonionic surfactant is substantially free of dimers and trimers; (c) optionally, an oxygen bleaching agent; (d) optionally, a builder; and (e) adjunct materials, preferably automatic dishwashing detergent adjunct materials selected from the group consisting of enzymes, chelating agents, and mixtures thereof; wherein the weight ratio the nonionic surfactants to the oxide surfactant is within the range of from 25:1 to 1:5; the stains are selected from tomato stains, carotene stains, and mixtures thereof; and wherein the composition prevents redeposition of the stains once it has been removed from the stained surface.

IPC 1-7
C11D 1/825

IPC 8 full level
C11D 1/722 (2006.01); **C11D 1/75** (2006.01); **C11D 1/755** (2006.01); **C11D 1/79** (2006.01); **C11D 1/825** (2006.01); **C11D 3/39** (2006.01)

CPC (source: EP)
C11D 1/722 (2013.01); **C11D 1/75** (2013.01); **C11D 1/755** (2013.01); **C11D 1/79** (2013.01); **C11D 1/825** (2013.01); **C11D 3/39** (2013.01)

Citation (search report)
See references of WO 0050552A1

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

DOCDB simple family (publication)
WO 0050552 A1 20000831; AU 2877600 A 20000914; CA 2363097 A1 20000831; CA 2363097 C 20040406; EP 1155107 A1 20011121; JP 2002537485 A 20021105

DOCDB simple family (application)
US 0003454 W 20000210; AU 2877600 A 20000210; CA 2363097 A 20000210; EP 00907252 A 20000210; JP 2000601116 A 20000210