

Title (en)  
Antimicrobial hard surface cleaner

Title (de)  
Antimikrobieller Reiniger für harte Oberflächen

Title (fr)  
Produit de nettoyage antimicrobien pour surface dure

Publication  
**EP 0691397 B1 20041006 (EN)**

Application  
**EP 95304637 A 19950703**

Priority  
US 27168194 A 19940707

Abstract (en)  
[origin: EP0691397A2] The invention provides an aqueous, antimicrobial hard surface cleaner with significantly improved residue removal and substantially reduced filming/streaking, said cleaner comprising: (a) an effective amount of a solvent selected from C1-6 alkanol, C3-24 alkylene glycol ether, and mixtures thereof; (b) an effective amount of a surfactant selected from amphoteric, nonionic surfactants, and mixtures thereof; (c) an effective amount of a quaternary ammonium surfactant; (d) an effective amount of a builder; and (d) the remainder as substantially all water.

IPC 1-7  
**C11D 3/00**; **C11D 3/20**; **C11D 1/835**; **C11D 1/94**; **C11D 3/43**

IPC 8 full level  
**C11D 10/02** (2006.01); **C11D 1/835** (2006.01); **C11D 1/94** (2006.01); **C11D 3/43** (2006.01); **C11D 3/48** (2006.01); **C11D 1/62** (2006.01); **C11D 1/66** (2006.01); **C11D 1/72** (2006.01); **C11D 1/75** (2006.01); **C11D 1/90** (2006.01)

CPC (source: EP)  
**C11D 1/835** (2013.01); **C11D 1/94** (2013.01); **C11D 3/43** (2013.01); **C11D 3/48** (2013.01); **C11D 1/62** (2013.01); **C11D 1/66** (2013.01); **C11D 1/72** (2013.01); **C11D 1/75** (2013.01); **C11D 1/90** (2013.01)

Citation (examination)  
US 3694365 A 19720926 - CASTNER CHARLES S

Cited by  
US6187737B1; US8172953B2; US6017869A; US6159924A; US5929007A; US5929016A; CN1308426C; EP0826767A1; US5916864A; GB2319180A; US5908854A; GB2319180B; GB2320927A; US6030936A; GB2320927B; US6090771A; EP0937125A4; AU2003281521B2; ES2161169A1; AU726452B2; CN107835852A; EP3322790A4; EP4219671A3; US7741263B2; US10647948B2; WO9824314A1; WO9744427A1; WO0005330A1; WO0226268A3; WO2022106413A1; US6750190B2; US6933267B2; US10975333B2; US7576047B2; US7799751B2; US8389463B2; EP3418361A1; KR100493999B1; US6673761B2; US6825158B2; US8216994B2; WO0248299A1; WO9817763A1; US6723692B2; EP3418368A1; WO2018237129A1; US8071520B2; EP3417709A1; WO2018237126A1; US10696930B2; US11834624B2; WO2004009754A1; WO03050229A1; WO9855578A1

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

DOCDB simple family (publication)  
**EP 0691397 A2 19960110**; **EP 0691397 A3 19970305**; **EP 0691397 B1 20041006**; AT E278757 T1 20041015; DE 69533603 D1 20041111; DE 69533603 T2 20060209; ES 2229226 T3 20050416; JP H0827491 A 19960130; KR 100378903 B1 20030523

DOCDB simple family (application)  
**EP 95304637 A 19950703**; AT 95304637 T 19950703; DE 69533603 T 19950703; ES 95304637 T 19950703; JP 19408795 A 19950707; KR 19950019702 A 19950706