

Title (en)
SURFACTANT-CONTAINING MIXTURE FOR CLEANING HARD SURFACES

Publication
EP 0054894 B1 19840725 (DE)

Application
EP 81110471 A 19811216

Priority
DE 3048641 A 19801223

Abstract (en)
[origin: CA1160535A] - 1 - HOE 80/F 932 of the disclosure: A detergent composition which is particularly suitable for the mechanical cleaning of hard surfaces, in particular glass, porcelain and the like, in a cleaning liquor within the alkaline range, is described. This detergent composition comprises A) a nonionic surfactant selected from the group comprising polyalkylene glycol monoalkyl ethers containing ethylene oxide and propylene oxide units, polyglycol ether formals containing ethylene oxide units and, if appropriate, propylene oxide units, or polyalkylene glycol dialkyl ethers containing ethylene oxide units and, if appropriate, propylene oxide units, B) a selected quaternary ammonium compound as a cationic surfactant, and C) a fluorinated alcohol as an antifoaming agent. These compositions are particularly suitable for industrial crockery-cleaning and bottle-cleaning plants which are operated with considerable mechanical agitation of the liquor within a highly alkaline pH range.

IPC 1-7
C11D 1/835; **C11D 3/24**; **C11D 1/72**; **C11D 3/00**

IPC 8 full level
C11D 1/722 (2006.01); **C11D 1/72** (2006.01); **C11D 1/835** (2006.01); **C11D 3/00** (2006.01); **C11D 3/24** (2006.01); **C11D 1/62** (2006.01)

CPC (source: EP US)
C11D 1/835 (2013.01 - EP US); **C11D 1/8355** (2013.01 - EP US); **C11D 3/245** (2013.01 - EP US); **C11D 1/62** (2013.01 - EP US); **C11D 1/721** (2013.01 - EP US); **C11D 1/722** (2013.01 - EP US)

Cited by
EP0276050A1; WO9117233A1; EP0119641B1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0054894 A1 19820630; **EP 0054894 B1 19840725**; AT E8658 T1 19840815; CA 1160535 A 19840117; DE 3048641 A1 19820715; DE 3165128 D1 19840830; JP H0225960 B2 19900606; JP S58109599 A 19830629; US 4443364 A 19840417

DOCDB simple family (application)
EP 81110471 A 19811216; AT 81110471 T 19811216; CA 392972 A 19811222; DE 3048641 A 19801223; DE 3165128 T 19811216; JP 20627881 A 19811222; US 33076881 A 19811214