

Title (en)

QUATERNARY AMMONIUM COMPOUNDS CONTAINING CATIONIC SURFACTANTS AND THEIR USE IN CLEANING COMPOSITIONS

Publication

**EP 0189085 B1 19900919 (DE)**

Application

**EP 86100364 A 19860113**

Priority

DE 3501775 A 19850121

Abstract (en)

[origin: US4678605A] The invention relates to new cationic surfactants based on quaternary ammonium compounds corresponding to the general formula  $R_1-CHOH-CHR_2-N^+R_3R_4R_5R_6CO_2^{-(1)}$  wherein  $R_1$  is a linear or branched alkyl residue having from 1 to 22 carbon atoms;  $R_2$  is hydrogen or a linear or branched alkyl residue having from 1 to 21 carbon atoms, the total number of carbon atoms of the substituents  $R_1$  and  $R_2$  being in the range of from 8 to 22;  $R_3$  and  $R_4$  each represent methyl, ethyl, 2-hydroxyethyl or 2-hydroxypropyl;  $R_5$  represents an alkyl residue having from 4 to 6 carbon atoms or a phenalkyl residue having from 1 to 3 carbon atoms in the alkyl residue; and  $R_6$  represents a linear or branched alkyl residue having from 4 to 15 carbon atoms. The cationic surfactants have particular utility in cleaning agents.

IPC 1-7

**C07C 215/40; C11D 1/62**

IPC 8 full level

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CPC (source: EP US)

**C11D 1/62** (2013.01 - EP US)

Citation (examination)

- US 4040992 A 19770809 - BECHARA IBRAHIM S, et al
- US 2759975 A 19560821 - CHIDDIX MAX E, et al

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EP0345475A1; EP0336267A3; EP0249164A1; US4814108A; EP2604674A1; EP4219667A3; WO8909204A1; WO2013087701A1

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