

Title (en)

IMPROVEMENTS RELATING TO LIMESCALE REMOVING COMPOSITIONS

Title (de)

ZUSAMMENSETZUNGEN ZUM ENTFERNEN VON KALKSTEIN

Title (fr)

AMELIORATIONS CONCERNANT DES COMPOSITIONS DE DETARTRAGE

Publication

EP 0912676 B1 20020227 (EN)

Application

EP 97921788 A 19970425

Priority

- EP 9702161 W 19970425
- GB 9610965 A 19960524

Abstract (en)

[origin: WO9745515A1] In limescale-removing compositions of pH 1-5, comprising 1-15 wt.% of a dicarboxylic acid and 1-30 wt.% of an anionic surfactant other than fatty acid, the presence of 0.1-10 wt.% of a fatty acid, prevents low temperature instability of the product which leads to precipitation of the dicarboxylic acid.

IPC 1-7

C11D 3/20; C11D 1/37

IPC 8 full level

C11D 1/37 (2006.01); **C11D 3/20** (2006.01); **C11D 1/02** (2006.01); **C11D 1/04** (2006.01); **C11D 1/14** (2006.01); **C11D 1/22** (2006.01)

CPC (source: EP)

C11D 1/37 (2013.01); **C11D 3/2082** (2013.01); **C11D 1/02** (2013.01); **C11D 1/04** (2013.01); **C11D 1/143** (2013.01); **C11D 1/146** (2013.01); **C11D 1/22** (2013.01)

Designated contracting state (EPC)

BE DE ES FR GB GR IT

DOCDB simple family (publication)

WO 9745515 A1 19971204; AR 007213 A1 19991013; AU 2772597 A 19980105; AU 723832 B2 20000907; BR 9709268 A 19990810; CA 2254844 A1 19971204; CA 2254844 C 20031021; DE 69710728 D1 20020404; DE 69710728 T2 20040708; EP 0912676 A1 19990506; EP 0912676 B1 20020227; ES 2171935 T3 20020916; GB 9610965 D0 19960731; ZA 973931 B 19981109

DOCDB simple family (application)

EP 9702161 W 19970425; AR P970102142 A 19970521; AU 2772597 A 19970425; BR 9709268 A 19970425; CA 2254844 A 19970425; DE 69710728 T 19970425; EP 97921788 A 19970425; ES 97921788 T 19970425; GB 9610965 A 19960524; ZA 973931 A 19970507