

Title (en)

USE OF LIPASES IN LOW-ALKALINE MECHANICAL DISHWASHING AGENTS

Title (de)

VERWENDUNG VON LIPASEN IN NIEDERALKALISCHEN MITTELEN ZUM MASCHINELLEN GESCHIRRSPÜLEN

Title (fr)

UTILISATION DE LIPASE DANS DES AGENTS FAIBLEMENT ALCALINS POUR LE LAVAGE DE VAISSELLE EN MACHINE

Publication

EP 0846155 B1 20000209 (DE)

Application

EP 96930089 A 19960823

Priority

- DE 19531197 A 19950825
- DE 19632283 A 19960809
- EP 9603727 W 19960823

Abstract (en)

[origin: WO9708281A1] The invention concerns low-alkaline mechanical dishwashing agents based on builder components, oxygen bleaches, anti-corrosion agents, hydrotropic substances, foam inhibitors and other components conventional in dishwashing agents. The object of the invention is to improve the cleaning of articles in which tea has been present. This object is achieved by the use of between 0.05 and 1.5 wt % of a lipase, optionally combined with between 1 and 15 wt % of a multipurpose organic acid, in particular citric acid.

IPC 1-7

C11D 3/386; **C11D 3/20**; **C11D 3/39**

IPC 8 full level

C11D 3/20 (2006.01); **C11D 3/386** (2006.01); **C11D 3/39** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP)

C11D 3/2082 (2013.01); **C11D 3/2086** (2013.01); **C11D 3/38627** (2013.01); **C11D 3/3902** (2013.01); **C11D 3/3942** (2013.01); **C11D 17/0091** (2013.01)

Citation (examination)

WO 9407985 A1 19940414 - PROCTER & GAMBLE [US], et al

Cited by

DE102011118037A1; WO2012171980A1; EP3770240A1; WO2021013685A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)

WO 9708281 A1 19970306; AT E189696 T1 20000215; EP 0846155 A2 19980610; EP 0846155 B1 20000209; ES 2143777 T3 20000516

DOCDB simple family (application)

EP 9603727 W 19960823; AT 96930089 T 19960823; EP 96930089 A 19960823; ES 96930089 T 19960823