

Title (en)

Aqueous composition for the pretreatment of dishes.

Title (de)

Wässriges Geschirrvorbehandlungsmittel.

Title (fr)

Composition aqueuse pour le prétraitement de la vaisselle.

Publication

EP 0268064 B1 19940323 (DE)

Application

EP 87114813 A 19871010

Priority

DE 3635535 A 19861018

Abstract (en)

[origin: US4818427A] A pretreatment or steeping preparation for cleaning stubbornly soiled dishes in an automatic dishwashing machine comprising from about 0.5 to about 20% by weight of a low-foaming nonionic surfactant, from about 0.5 to about 25% by weight of a polyhydric alcohol and/or glycol ether, from about 0.5 to about 10% by weight of a hydrotropic compound, and from about 0.01 to about 6% by weight of a viscosity regulator, all weights based on the weight of said preparation, in an aqueous suspension or solution adjusted to a viscosity of at least 5 mPa.s. and to a pH of from about 2 to about 7. In the cleaning process, the preparation is applied to the soiled dishes, the dishes are placed in an automatic dishwashing machine, and after waiting about 30 minutes the dishwashing machine is started for the normal washing cycle.

IPC 1-7

C11D 1/72; **C11D 3/20**; **C11D 17/00**

IPC 8 full level

C11D 1/72 (2006.01); **C11D 3/20** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP US)

C11D 1/72 (2013.01 - EP US); **C11D 1/721** (2013.01 - EP US); **C11D 3/2065** (2013.01 - EP US); **C11D 3/2072** (2013.01 - EP US); **C11D 17/003** (2013.01 - EP US); **C11D 3/2044** (2013.01 - EP US)

Cited by

EP1010421A1; US5575864A; US5837065A; WO2012073007A2; JP2017537672A; WO2016057623A1; WO0029533A1; EP3196281B1; EP3196281B2

Designated contracting state (EPC)

AT BE CH DE ES FR IT LI NL

DOCDB simple family (publication)

EP 0268064 A2 19880525; **EP 0268064 A3 19901227**; **EP 0268064 B1 19940323**; AT E103321 T1 19940415; DE 3635535 A1 19880428; DE 3635535 C2 19950518; DE 3789421 D1 19940428; ES 2050657 T3 19940601; US 4818427 A 19890404

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EP 87114813 A 19871010; AT 87114813 T 19871010; DE 3635535 A 19861018; DE 3789421 T 19871010; ES 87114813 T 19871010; US 11014187 A 19871019