

Title (en)  
STABLE, BIFUNCTIONAL, PHOSPHATE-, METASILICATE- AND POLYMER-FREE LOW ALKALINE DETERGENT TABLETS FOR DISHWASHING MACHINES, AND PROCESS FOR PRODUCING THE SAME

Title (de)  
STABILE, BIFUNKTIONELLE, PHOSPHAT-, METASILIKAT- UND POLYMERFREIE NIEDERALKALISCHE REINIGUNGSMITTELTABLETTEN FÜR DAS MASCHINELLE GESCHIRRSPÜLEN UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)  
COMPRIMES STABLES BIFONCTIONNELS DE PRODUITS DE LAVAGE A FAIBLE ALCALINITE, SANS PHOSPHATES, SANS METASILICATES ET SANS POLYMERES, POUR LAVE-VAISSELLE, ET LEUR PROCEDE DE PRODUCTION

Publication  
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Application  
**EP 94912526 A 19940323**

Priority  
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Abstract (en)  
[origin: US5691293A] PCT No. PCT/EP94/00932 Sec. 371 Date Oct. 2, 1995 Sec. 102(e) Date Oct. 2, 1995 PCT Filed Mar. 23, 1994 PCT Pub. No. WO94/23011 PCT Pub. Date Oct. 13, 1994A stable, dual-function, phosphate-, metasilicate- and polymer-free low alkali detergent tablet containing: (a) from 5 to 50% by weight of a sodium citrate; (b) from 1 to 60% by weight of anhydrous sodium carbonate; (c) from 1 to 60% by weight of sodium hydrogen carbonate; (d) a bleaching agent selected from the group consisting of sodium perborate monohydrate, sodium percarbonate and mixtures thereof; (e) from 0.5 to 4% by weight of tetraacetyl ethylenediamine; (f) from 0.1 to 2% by weight of protease; (g) from 0.1 to 2% by weight of amylase; and (h) from 3 to 10% by weight of water, all weights being based on the weight of the tablet.

IPC 1-7  
**C11D 17/00; C11D 3/20**

IPC 8 full level  
**C11D 1/66** (2006.01); **C11D 3/10** (2006.01); **C11D 3/20** (2006.01); **C11D 3/386** (2006.01); **C11D 3/39** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP US)  
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Cited by  
DE102009029636A1; WO2011032870A1; DE102007044417A1; DE102007006627A1; DE102007044418A1; WO2009037013A2; DE102009029635A1; WO2011032869A1; US8551930B2; DE102009029637A1; WO2011032868A1; WO2011051419A1; DE102009046216A1; DE102007006630A1; US7879154B2; DE202007019720U1; EP3567094A1; DE102008060470A1; DE102008063801A1; US8242068B2; US8268768B2; DE102007006629A1; DE102011007695A1; WO2012143315A1; US8303721B2; DE102007059677A1; DE102007006628A1; US9752100B2; DE102016212248A1; WO2018007298A1; EP3431575A1; DE102017212561A1

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