

Title (en)

Mixture of a surfactant with a solid compound for improving rinsing performance of automatic dishwashing detergents

Title (de)

Mischung aus einem Tensid mit einer Festverbindung zur Verbesserung der Spülleistung von automatischen Geschirrspülmitteln

Title (fr)

Mélange d'un agent tensioactif avec un composé solide pour améliorer la performance de rinçage de détergents pour le lavage automatique de la vaisselle

Publication

**EP 2392639 A1 20111207 (EN)**

Application

**EP 10164969 A 20100604**

Priority

EP 10164969 A 20100604

Abstract (en)

The present invention refers to a rinse aid additive comprising at least a surfactant and a solid compound, wherein said rinse aid additive is in form of a solid at room temperature, a method for preparing said rinse aid additive, a detergent composition comprising said rinse aid additive and the use of a blend comprising at least a surfactant and a solid compound as a rinse aid.

IPC 8 full level

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Citation (applicant)

- EP 1524313 A1 20050420 - DALLI WERKE GMBH & CO KG [DE]
- WO 2005095570 A1 20051013 - DALLI WERKE GMBH & CO KG [DE], et al
- DE 19934704 A1 20010125 - HENKEL KGAA [DE]
- EP 1363986 A1 20031126 - HENKEL KGAA [DE]
- EP 1268729 A1 20030102 - NAT STARCH CHEM INVEST [US]
- EP 0299513 A1 19890118 - FIDIA GEORGETOWN INST [US]
- EP 0877002 A2 19981111 - ROHM & HAAS [US]
- WO 2008101909 A1 20080828 - HENKEL AG & CO KGAA [DE], et al

Citation (search report)

- [X] EP 0423487 A2 19910424 - BENCKISER GMBH JOH A [DE]
- [X] EP 1103599 A1 20010530 - HENKEL KGAA [DE]
- [X] WO 9927067 A1 19990603 - PROCTER & GAMBLE [US], et al

Cited by

JP2018177972A; WO2017013161A1; WO2017013162A1; US11932830B2; JP2019513889A; US2021292681A1; US11773348B2; WO2024031317A1; US2021095227A1; CN114222808A; JP2022549666A; US2023085895A1; US11905493B2; US10745650B2; US11060048B2; US11518961B2; WO2021062143A1; EP2392639B1

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