

Title (en)

Enzymatic liquid detergent composition.

Title (de)

Flüssiges, enzymhaltiges Reinigungsmittel.

Title (fr)

Composition détergente liquide enzymatique.

Publication

**EP 0317307 A2 19890524 (EN)**

Application

**EP 88310846 A 19881117**

Priority

GB 8726999 A 19871118

Abstract (en)

A liquid detergent composition comprises a surfactant concentrate and a proteolytic enzyme derived from a microorganism: for improved storage stability in the liquid state the proteolytic enzyme is of the proteinase K type. Proteinase K is a known fungal alkaline serine protease from *Tritirachium album Limber*, and its use in liquid detergent compositions can provide enzymatic liquid detergent with improved enzyme storage stability in comparison with other proteolytic enzymes, thus reducing the amount of enzyme stabilisers usually required for proteolytic enzymes in liquid detergent compositions. Proteinase K also has improved performance in compositions with an increased ionic strength or molarity.

IPC 1-7

**C11D 3/386**

IPC 8 full level

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CPC (source: EP)

**C11D 3/38663** (2013.01)

Cited by

US2011086414A1; WO9425560A1

Designated contracting state (EPC)

CH DE ES FR GB IT LI NL SE

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**EP 0317307 A2 19890524**; **EP 0317307 A3 19901017**; AU 2568388 A 19890518; AU 610286 B2 19910516; BR 8806028 A 19890808; GB 8726999 D0 19871223; JP H02153999 A 19900613; NO 171993 B 19930215; NO 171993 C 19930526; NO 885128 D0 19881117; NO 885128 L 19890519; ZA 888661 B 19900725

DOCDB simple family (application)

**EP 88310846 A 19881117**; AU 2568388 A 19881117; BR 8806028 A 19881117; GB 8726999 A 19871118; JP 29224888 A 19881118; NO 885128 A 19881117; ZA 888661 A 19881118