

Title (en)

Stabilised aqueous enzyme composition containing formate and calcium ions.

Title (de)

Eine Formate und Calciumionen enthaltende stabile, wässrige Enzymzusammensetzung.

Title (fr)

Composition enzymatique aqueuse stabilisée contenant un des ions formiate et calcium.

Publication

**EP 0028866 A1 19810520 (EN)**

Application

**EP 80201059 A 19801107**

Priority

- US 9290679 A 19791109
- US 12385780 A 19800222

Abstract (en)

Stabilized aqueous enzyme compositions contain a stabilizing system comprising calcium ions and a low molecular weight carboxylic acid or salt, preferably a formate, preferably with a low molecular weight alcohol, and in a pH range of from about 6.5 to about 10. Most preferred is a detergent composition containing the stabilized enzymes.

IPC 1-7

**C11D 3/386**

IPC 8 full level

**C11D 3/386** (2006.01)

CPC (source: EP)

**C11D 3/38663** (2013.01)

Citation (search report)

- US 4111855 A 19780905 - BARRAT CHRISTIAN ROLAND, et al
- US 3819528 A 19740625 - BERRY J, et al
- US 3676374 A 19720711 - ZAKI WAHIB NASSIF, et al
- FR 2072316 A5 19710924 - PROCTER GAMBLE EUROP

Cited by

US5635464A; US5447649A; US5877141A; US5358656A; GB2148319A; FR2532324A1; EP0376705A1; EP0118933A1; AU575313B2; FR2579221A1; CH678584GA3; WO9813459A1; WO2007145608A3; WO2024012894A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT NL

DOCDB simple family (publication)

**EP 0028866 A1 19810520; EP 0028866 B1 19840711; DE 3068554 D1 19840816**

DOCDB simple family (application)

**EP 80201059 A 19801107; DE 3068554 T 19801107**