

Title (en)

ALKALINE PROTEASE VARIANTS AND DETERGENTS AND CLEANSERS CONTAINING THESE ALKALINE PROTEASE VARIANTS

Title (de)

ALKALISCHE PROTEASE-VARIANTEN UND WASCH- UND REINIGUNGSMITTEL ENTHALTEND DIESE ALKALISCHEN PROTEASE-VARIANTEN

Title (fr)

VARIANTS DE PROTEASE ALCALINE ET DETERGENTS ET PRODUITS DE LAVAGE CONTENANT CES VARIANTES

Publication

EP 1442120 A2 20040804 (DE)

Application

EP 02785253 A 20021019

Priority

- DE 10153792 A 20011031
- EP 0211725 W 20021019

Abstract (en)

[origin: WO03038082A2] The invention relates to novel alkaline protease variants. These variants have, when enumerating the alkaline protease from *Bacillus latus*, variations in amino acid position 61, positions 199 and/or 211 and, optionally, at least one modification that contributes to the stabilization of the molecule, said modification preferably being point mutations in positions 3 and/or 4. Particularly preferred are variants S3T/V4I/G61A/V199I and S3T/V4I/G61A/V199I/L211D of *B. latus* alkaline protease. The invention also relates to the possible uses of these enzymes in diverse technical processes and, in particular, to detergents and cleansers containing these novel alkaline protease variants.

IPC 1-7

C12N 9/54; C11D 3/386; C12N 15/57; A61K 7/28

IPC 8 full level

A23C 19/032 (2006.01); **A23L 1/00** (2006.01); **A61K 8/00** (2006.01); **A61K 8/66** (2006.01); **A23K 1/165** (2006.01); **A61K 8/72** (2006.01); **C12N 9/54** (2006.01); **A61Q 19/10** (2006.01); **C11D 3/386** (2006.01); **C12N 1/15** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 5/10** (2006.01); **C12N 15/09** (2006.01); **C12N 15/57** (2006.01); **C12P 21/06** (2006.01); **C12Q 1/37** (2006.01); **C14C 11/00** (2006.01); **D06L 4/40** (2017.01); **D06M 16/00** (2006.01); **D06M 101/12** (2006.01)

CPC (source: EP US)

C11D 3/38681 (2013.01 - EP US); **C12N 9/54** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03038082 A2 20030508; WO 03038082 A3 20030918; CN 100462434 C 20090218; CN 1578832 A 20050209; DE 10153792 A1 20030522; EP 1442120 A2 20040804; HK 1069849 A1 20050603; HU 225362 B1 20061028; HU P0500058 A2 20050428; HU P0500058 A3 20060328; JP 2005507259 A 20050317; US 2005003985 A1 20050106; US 7320887 B2 20080122

DOCDB simple family (application)

EP 0211725 W 20021019; CN 02821602 A 20021019; DE 10153792 A 20011031; EP 02785253 A 20021019; HK 05102333 A 20050317; HU P0500058 A 20021019; JP 2003540347 A 20021019; US 83695904 A 20040430