

Title (en)
NOVEL ALKALINE PROTEASE FROM BACILLUS SP. (DSM 14390) AND WASHING AND CLEANING PRODUCTS COMPRISING SAID NOVEL ALKALINE PROTEASE

Title (de)
ALKALISCHE PROTEASE AUS BACILLUS SP. (DSM 14390) UND WASCH- UND REINIGUNGSMITTEL ENHALTEND DIESE ALKALISCHE PROTEASE

Title (fr)
NOUVELLE PROTEASE ALCALINE OBTENUE A PARTIR DE i BACILLUS SP /i (DSM 14390) ET AGENTS DE LAVAGE ET DE NETTOYAGE CONTENANT CETTE PROTEASE ALCALINE

Publication
EP 1456384 A2 20040915 (DE)

Application
EP 02795171 A 20021212

Priority
• DE 10163883 A 20011222
• EP 0214129 W 20021212

Abstract (en)
[origin: WO03056017A2] The invention relates to a novel alkaline protease of the subtilisin type from Bacillus sp. (DSM 14390) and various related proteins and derivatives thereof. The invention further relates to washing and cleaning agents comprising said novel alkaline proteases of the subtilisin type, various related proteins and derivatives thereof and corresponding washing and cleaning methods and use thereof in washing and cleaning agents and further technical applications.

IPC 1-7
C12N 15/57; **C12N 15/62**; **C12N 9/54**; **C12N 5/10**; **C12N 1/21**; **C11D 3/386**; **D06M 15/15**

IPC 8 full level
A61K 8/00 (2006.01); **A61K 8/64** (2006.01); **A61K 8/66** (2006.01); **A61K 8/96** (2006.01); **A61Q 19/10** (2006.01); **C07K 19/00** (2006.01); **C11D 3/386** (2006.01); **A23K 1/165** (2006.01); **C12N 1/15** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 5/10** (2006.01); **C12N 9/54** (2006.01); **C12N 9/56** (2006.01); **C12N 15/09** (2006.01); **C12N 15/57** (2006.01); **D06L 1/20** (2006.01); **D06L 4/40** (2017.01); **D06M 15/15** (2006.01)

CPC (source: EP US)
C12N 9/54 (2013.01 - EP US); **C07K 2319/00** (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 SI SK TR

DOCDB simple family (publication)
WO 03056017 A2 20030710; **WO 03056017 A3 20031016**; AU 2002361062 A1 20030715; AU 2002361062 A8 20030715; CN 100366746 C 20080206; CN 1606626 A 20050413; DE 10163883 A1 20030710; EP 1456384 A2 20040915; HK 1071770 A1 20050729; HU P0402429 A2 20050228; HU P0402429 A3 20050728; JP 2005525794 A 20050902; US 2005009167 A1 20050113

DOCDB simple family (application)
EP 0214129 W 20021212; AU 2002361062 A 20021212; CN 02825541 A 20021212; DE 10163883 A 20011222; EP 02795171 A 20021212; HK 05104497 A 20050530; HU P0402429 A 20021212; JP 2003556534 A 20021212; US 87391704 A 20040622