

Title (en)

IMPROVED METHOD FOR THE PRODUCTION OF VITAMIN B12

Title (de)

VERBESSERTES VERFAHREN ZUR HERSTELLUNG VON VITAMIN B12

Title (fr)

PROCEDE AMELIORE DE PRODUCTION DE VITAMINE B12

Publication

EP 1592785 A2 20051109 (DE)

Application

EP 03785798 A 20031212

Priority

- EP 0314102 W 20031212
- DE 10300719 A 20030111

Abstract (en)

[origin: WO2004063360A2] The invention relates to a method for producing vitamin B12 by means of a culture containing a genetically modified *Bacillus megaterium* strain, a genetically modified *Bacillus megaterium* strain, and vectors for the production thereof.

IPC 1-7

C12N 1/20

IPC 8 full level

C12N 1/21 (2006.01); **C12N 9/02** (2006.01); **C12P 19/42** (2006.01)

CPC (source: EP US)

C12N 9/001 (2013.01 - EP US); **C12P 19/42** (2013.01 - EP US)

Citation (search report)

See references of WO 2004063360A2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 2004063360 A2 20040729; **WO 2004063360 A3 20041209**; **WO 2004063360 A9 20050811**; AU 2003294837 A1 20040810; AU 2003294837 A8 20040810; CA 2512857 A1 20040729; CN 1759175 A 20060412; DE 10300719 A1 20040722; EP 1592785 A2 20051109; IL 169352 A0 20070704; JP 2006512913 A 20060420; NO 20053205 D0 20050630; NO 20053205 L 20051003; US 2006105432 A1 20060518

DOCDB simple family (application)

EP 0314102 W 20031212; AU 2003294837 A 20031212; CA 2512857 A 20031212; CN 200380110144 A 20031212; DE 10300719 A 20030111; EP 03785798 A 20031212; IL 16935205 A 20050623; JP 2004565964 A 20031212; NO 20053205 A 20050630; US 54192005 A 20050805