

(19)



(11)

EP 1 812 023 B8

(12)

CORRECTED EUROPEAN PATENT SPECIFICATION

(15) Correction information:

Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 73

(51) Int Cl.:

A61K 35/74 (2006.01) A61P 31/00 (2006.01)

(48) Corrigendum issued on:

26.12.2012 Bulletin 2012/52

(86) International application number:

PCT/EP2005/011152

(45) Date of publication and mention of the grant of the patent:

01.08.2012 Bulletin 2012/31

(87) International publication number:

WO 2006/045475 (04.05.2006 Gazette 2006/18)

(21) Application number: **05795238.4**

(22) Date of filing: **17.10.2005**

(54) **LACTIC ACID BACTERIA AS PROBIOTIC STRAINS AND COMPOSITIONS CONTAINING SAME**

MILCHSÄURE-BAKTERIEN ALS PROBIOTISCHE STÄMME UND DIESE ENTHALTENDE ZUSAMMENSETZUNGEN

BACTERIES LACTIQUES UTILISEES COMME SOUCHES PROBIOTIQUES ET COMPOSITIONS LES CONTENANT

(84) Designated Contracting States:

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

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(30) Priority: **22.10.2004 PCT/EP2004/011980**

22.10.2004 PCT/EP2004/011981

10.02.2005 PCT/EP2005/001354

(56) References cited:

EP-A- 0 956 858 WO-A-90/09398

WO-A-03/080813 US-A- 5 645 830

US-A- 6 093 394

(43) Date of publication of application:

01.08.2007 Bulletin 2007/31

- **BORIS S ET AL: "Adherence of human vaginal lactobacilli to vaginal epithelial cells and interaction with uropathogens" INFECTION AND IMMUNITY, AMERICAN SOCIETY FOR MICROBIOLOGY. WASHINGTON, US, vol. 66, no. 5, May 1998 (1998-05), pages 1985-1989, XP002958494 ISSN: 0019-9567**
- **OCANA V ET AL: "ADHESION OF LACTOBACILLUS VAGINAL STRAINS WITH PROBIOTIC PROPERTIES TO VAGINAL EPITHELIAL CELLS" BIOCELL, INSTITUTO DE HISTOLOGIA EMBRIOLOGIA, FACULTAD DE CIENCIAS,, AR, vol. 25, no. 3, 2001, pages 265-273, XP001115002 ISSN: 0327-9545**

(60) Divisional application:

12178634.7

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- TODORIKI K ET AL: "Inhibition of adhesion of food-borne pathogens to Caco-2 cells by Lactobacillus strains" JOURNAL OF APPLIED MICROBIOLOGY, vol. 91, no. 1, July 2001 (2001-07), pages 154-159, XP002332588 ISSN: 1364-5072
- GRANATO, DOMINIQUE ET AL: "Cell surface-associated lipoteichoic acid acts as an adhesion factor for attachment of Lactobacillus johnsonii La1 to human enterocyte-like caco-2 cells" APPLIED AND ENVIRONMENTAL MICROBIOLOGY , 65(3), 1071-1077 CODEN: AEMIDF; ISSN: 0099-2240, 1999, XP002332589
- PFEIFER A ET AL: "Immunological effect of probiotic food" MONATSSCHRIFT FÜR KINDERHEILKUNDE 1998 GERMANY, vol. 146, no. 8 SUPPL. 1, 1998, pages S13-S20, XP009049233 ISSN: 0026-9298
- DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; 2003, BRASSART, D.: "L. acidophilus NCFM: functional properties of a unique probiotic strain" XP002332655 retrieved from STN Database accession no. 140:162498 & INTERNATIONAL DAIRY FEDERATION [SPECIAL ISSUE] S.I. , 0301 (FERMENTED MILK), 136-143 CODEN: IDFSEO; ISSN: 1025-8515, 2003,
- DATABASE BIOSIS [Online] BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; March 2004 (2004-03), HUANG CANGHAI ET AL: "Effects of Lactobacilli on the performance, diarrhea incidence, VFA concentration and gastrointestinal microbial flora of weaning pigs." XP002332656 Database accession no. PREV200400233250 & ASIAN-AUSTRALASIAN JOURNAL OF ANIMAL SCIENCES, vol. 17, no. 3, March 2004 (2004-03), pages 401-409, ISSN: 1011-2367
- DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; 1999, MICHETTI, PIERRE ET AL: "Effect of whey-based culture supernatant of Lactobacillus acidophilus (johnsonii) La1 on Helicobacter pylori infection in humans" XP002332657 retrieved from STN Database accession no. 131:17350 & DIGESTION , 60(3), 203-209 CODEN: DIGEBW; ISSN: 0012-2823, 1999,
- PERDIGON ET AL.: 'Interaction of lactic acid bacteria with the gut immune system.' EUROPEAN JOURNAL OF CLINICAL NUTRITION vol. 56, no. SUPPL 4, pages S21 - S26

Remarks:

The file contains technical information submitted after the application was filed and not included in this specification