

Title (en)
FRUCTOPHILIC LACTIC ACID PRODUCING BACTERIA

Title (de)
MILCHSÄURE PRODUZIERENDE FRUCTOPHILE BAKTERIEN

Title (fr)
BACTÉRIES PRODUISANT DE L'ACIDE LACTIQUE FRUCTOPHILE

Publication
EP 3969606 A4 20230111 (EN)

Application
EP 19929028 A 20190513

Priority
US 2019031965 W 20190513

Abstract (en)
[origin: WO2020231397A1] The present invention discloses a novel fructophilic lactic acid producing bacteria *Bacillus coagulans* strain FF-7 (MTCC 25235) and the process of isolation and characterization of the bacteria. The invention also discloses the biological applications/therapeutic use of fructophilic lactic acid producing bacteria in increased utilization of fructose from food stuff and in the managing disorders related to high fructose intake.

IPC 8 full level
C12Q 1/68 (2018.01); **C12N 15/74** (2006.01)

CPC (source: EP KR)
A61K 35/742 (2013.01 - EP KR); **A61P 3/04** (2018.01 - KR); **A61P 3/10** (2018.01 - KR); **C12N 1/20** (2013.01 - EP KR); **C12N 1/205** (2021.05 - EP); **C12P 7/52** (2013.01 - EP KR); **C12P 7/54** (2013.01 - EP KR); **C12Q 1/689** (2013.01 - EP KR); **C12R 2001/07** (2021.05 - EP); **Y02A 50/30** (2018.01 - EP)

Citation (search report)

- [X] US 2009181000 A1 20090716 - FARMER SEAN [US], et al
- [A] PACHLA ARTUR ET AL: "The molecular and phenotypic characterization of fructophilic lactic acid bacteria isolated from the guts of *Apis mellifera* L. derived from a Polish apiary", JOURNAL OF APPLIED GENETICS: AN INTERNATIONAL JOURNAL OF GENETICS AND BREEDING, vol. 59, no. 4, 29 September 2018 (2018-09-29), Germany, pages 503 - 514, XP093005075, ISSN: 1234-1983, Retrieved from the Internet <URL:http://link.springer.com/content/pdf/10.1007/s13353-018-0467-0.pdf> DOI: 10.1007/s13353-018-0467-0
- [A] ENDO AKIHITO ET AL: "Honeybees and beehives are rich sources for fructophilic lactic acid bacteria", SYSTEMATIC AND APPLIED MICROBIOLOGY, vol. 36, no. 6, 1 September 2013 (2013-09-01), AMSTERDAM, NL, pages 444 - 448, XP093004738, ISSN: 0723-2020, DOI: 10.1016/j.syapm.2013.06.002
- [A] LUU STEPHANIE ET AL: "The Effects of Heat Activation on *Bacillus* Spore Germination, with Nutrients or under High Pressure, with or without Various Germination Proteins", APPLIED AND ENVIRONMENTAL MICROBIOLOGY, vol. 81, no. 8, 15 April 2015 (2015-04-15), US, pages 2927 - 2938, XP093004941, ISSN: 0099-2240, Retrieved from the Internet <URL:https://journals.asm.org/doi/pdf/10.1128/AEM.00193-15> DOI: 10.1128/AEM.00193-15
- See also references of WO 2020231397A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2020231397 A1 20201119; AU 2019445706 A1 20220106; AU 2019445706 B2 20240418; BR 112021022916 A2 20220118; CA 3140038 A1 20201119; CN 114207107 A 20220318; EP 3969606 A1 20220323; EP 3969606 A4 20230111; JP 2022536252 A 20220815; JP 7469332 B2 20240416; KR 20220007660 A 20220118; MX 2021013902 A 20220311; ZA 202110214 B 20230628

DOCDB simple family (application)
US 2019031965 W 20190513; AU 2019445706 A 20190513; BR 112021022916 A 20190513; CA 3140038 A 20190513; CN 201980097794 A 20190513; EP 19929028 A 20190513; JP 2021568485 A 20190513; KR 20217040516 A 20190513; MX 2021013902 A 20190513; ZA 202110214 A 20211209