

Title (en)

METHODS, APPARATUSES, AND SYSTEMS FOR ANALYZING MICROORGANISM STRAINS IN COMPLEX HETEROGENEOUS COMMUNITIES, DETERMINING FUNCTIONAL RELATIONSHIPS AND INTERACTIONS THEREOF, AND DIAGNOSTICS AND BIOSTATE MANAGEMENT BASED THEREON

Title (de)

VERFAHREN, VORRICHTUNGEN UND SYSTEME ZUR ANALYSE VON MIKROORGANISMENSTÄMMEN IN KOMPLEXEN HETEROGENEN GEMEINSCHAFTEN, ZUR BESTIMMUNG FUNKTIONELLER BEZIEHUNGEN UND WECHSELWIRKUNGEN DAVON UND DARAUF BASIERENDE DIAGNOSTIK UND BIOZUSTANDSVERWALTUNG

Title (fr)

PROCÉDÉS, APPAREILS ET SYSTÈMES PERMETTANT D'ANALYSER DES SOUCHES DE MICRO-ORGANISMES DANS DES COMMUNAUTÉS HÉTÉROGÈNES COMPLEXES, DE DÉTERMINER LEURS INTERACTIONS ET RELATIONS FONCTIONNELLES, ET GESTION DE DIAGNOSTICS ET D'ÉTATS BIOLOGIQUES BASÉE SUR CEUX-CI

Publication

EP 3562956 A4 20201014 (EN)

Application

EP 17887981 A 20171228

Priority

- US 201662439804 P 20161228
- US 201762560174 P 20170918
- US 2017068753 W 20171228

Abstract (en)

[origin: WO2018126033A1] Methods, apparatuses, and systems for analyzing microorganism strains in complex heterogeneous communities, determining functional relationships and interactions thereof, and diagnostics and biostate management based thereon are disclosed. Methods for diagnostics, analytics, and treatments of states and state aberrations/ deviations, including treatments, such as bioreactive modicators, such as bioreactive modicators comprising synthetic microbial ensembles, are also disclosed.

IPC 8 full level

C12Q 1/06 (2006.01); **A23K 10/18** (2016.01); **A23K 50/10** (2016.01); **A23K 50/75** (2016.01); **G16B 5/00** (2019.01); **G16B 5/20** (2019.01)

CPC (source: EP US)

C12Q 1/06 (2013.01 - EP); **G01N 33/56911** (2013.01 - EP US); **G16B 5/20** (2019.01 - EP US); **G16B 20/00** (2019.01 - EP);
C12Q 1/689 (2013.01 - EP); **G16B 5/00** (2019.01 - EP); **G16B 10/00** (2019.01 - EP); **G16B 30/10** (2019.01 - EP); **G16B 30/20** (2019.01 - EP);
G16B 40/00 (2019.01 - EP)

Citation (search report)

- [XI] UY 36754 A 20161130 - ASCUS BIOSCIENCES INC [US]
- [XP] WO 2016210251 A1 20161229 - ASCUS BIOSCIENCES INC [US]
- [A] CN 104814278 A 20150805 - UNIV JIANGSU NORMAL
- [A] US 2013121968 A1 20130516 - QUAY STEVEN C [US]
- [A] PAVEL PETRENKO ET AL: "MetAnnotate: function-specific taxonomic profiling and comparison of metagenomes", BMC BIOLOGY, vol. 13, no. 1, 5 November 2015 (2015-11-05), XP055458828, DOI: 10.1186/s12915-015-0195-4
- [A] ANDREAS BREMGES ET AL: "Deeply sequenced metagenome and metatranscriptome of a biogas-producing microbial community from an agricultural production-scale biogas plant", GIGASCIENCE, vol. 4, no. 1, 30 July 2015 (2015-07-30), XP055458912, DOI: 10.1186/s13742-015-0073-6
- [A] CORINNE FERRIER MAURICE ET AL: "Xenobiotics Shape the Physiology and Gene Expression of the Active Human Gut Microbiome", CELL, vol. 152, no. 1-2, 1 January 2013 (2013-01-01), pages 39 - 50, XP055458905, ISSN: 0092-8674, DOI: 10.1016/j.cell.2012.10.052
- [A] KELSEA A. JEWELL ET AL: "Ruminal Bacterial Community Composition in Dairy Cows Is Dynamic over the Course of Two Lactations and Correlates with Feed Efficiency", APPLIED AND ENVIRONMENTAL MICROBIOLOGY, vol. 81, no. 14, 1 May 2015 (2015-05-01), US, pages 4697 - 4710, XP055396829, ISSN: 0099-2240, DOI: 10.1128/AEM.00720-15
- [A] BOYANG JI ET AL: "From next-generation sequencing to systematic modeling of the gut microbiome", FRONTIERS IN GENETICS, vol. 6, 23 June 2015 (2015-06-23), XP055727043, DOI: 10.3389/fgene.2015.00219
- See references of WO 2018126033A1

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 2018126033 A1 20180705; AU 2017388532 A1 20190725; CA 3048247 A1 20180705; CN 110392738 A 20191029;
EP 3562956 A1 20191106; EP 3562956 A4 20201014; IL 267646 A 20190829; JP 2020507308 A 20200312; MX 2019007764 A 20191015

DOCDB simple family (application)

US 2017068753 W 20171228; AU 2017388532 A 20171228; CA 3048247 A 20171228; CN 201780087481 A 20171228;
EP 17887981 A 20171228; IL 26764619 A 20190625; JP 2019535790 A 20171228; MX 2019007764 A 20171228