

Title (en)

IMPROVED CYSTEINE-PRODUCING STRAINS

Title (de)

VERBESSERTE CYSTEIN PRODUZIERENDE STÄMME

Title (fr)

SOUCHES AMÉLIORÉES PRODUISANT DE LA CYSTÉINE

Publication

EP 4172310 A1 20230503 (DE)

Application

EP 20735534 A 20200626

Priority

EP 2020068021 W 20200626

Abstract (en)

[origin: WO2021259491A1] The invention relates to a microorganism strain which is suitable for the fermentative production of L-cysteine, characterised in that the relative enzyme activity of the enzyme class denoted in the KEGG database by the number EC 2.7.9.2 is inactivated or, based on the specific activity of the wild-type enzyme, is reduced, and the enzyme class denoted in the KEGG database by the number EC 2.1.9.2 forms an increased amount of L-cysteine compared with the microorganism strain with wild type enzyme activity, wherein the gene coding this enzyme activity is denoted by ppsA. The invention also provides a method for producing L-cysteine using these microorganism cells.

IPC 8 full level

C12N 1/20 (2006.01); **C12N 9/12** (2006.01); **C12P 13/12** (2006.01)

CPC (source: EP KR US)

C12N 1/20 (2013.01 - EP KR US); **C12N 9/0006** (2013.01 - US); **C12N 9/1029** (2013.01 - US); **C12N 9/1294** (2013.01 - EP KR US);
C12N 15/70 (2013.01 - KR US); **C12P 13/12** (2013.01 - EP KR US); **C12Y 207/09002** (2013.01 - EP KR); **C12R 2001/19** (2021.05 - US);
C12Y 101/01095 (2013.01 - US); **C12Y 203/0103** (2013.01 - US); **C12Y 207/09002** (2013.01 - US)

Citation (search report)

See references of WO 2021259491A1

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021259491 A1 20211230; CN 116018400 A 20230425; EP 4172310 A1 20230503; JP 2023532871 A 20230801;
KR 20230025010 A 20230221; US 2023265473 A1 20230824

DOCDB simple family (application)

EP 2020068021 W 20200626; CN 202080102380 A 20200626; EP 20735534 A 20200626; JP 2022580253 A 20200626;
KR 20237001935 A 20200626; US 202018012296 A 20200626