Title (en)

METHODS OF PRODUCING 6-CARBON CHEMICALS VIA CoA-DEPENDENT CARBON CHAIN ELONGATION ASSOCIATED WITH CARBON STORAGE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON 6-KOHLENSTOFF-CHEMIKALIEN DURCH COA-ABHÄNGIGE KOHLENSTOFFKETTENVERLÄNGERUNG MIT KOHLENSTOFFSPEICHERUNG

Title (fr)

PROCÉDÉS DE FABRICATION DE PRODUITS CHIMIQUES À 6-CARBONES PAR ALLONGEMENT DE CHAÎNE CARBONÉE DÉPENDANT DE COA ASSOCIÉE À UN STOCKAGE DE CARBONE

Publication

EP 2791347 A2 20141022 (EN)

Application

EP 12809062 A 20121214

Priority

- US 201161576401 P 20111216
- US 2012069934 W 20121214

Abstract (en)

[origin: WO2013090837A2] This document describes biochemical pathways for producing adipic acid, caprolactam, 6-aminohexanoic acid, hexamethylenediamine or 1,6-hexanediol by forming two terminal functional groups, comprised of carboxyl, amine or hydroxyl groups, in a C6 aliphatic backbone substrate. These pathways, metabolic engineering and cultivation strategies described herein rely on CoA-dependent elongation enzymes or analogues enzymes associated with the carbon storage pathways from polyhydroxyalkanoate accumulating bacteria.

IPC 8 full level

C12P 7/18 (2006.01); **C12P 7/44** (2006.01); **C12P 13/00** (2006.01); **C12P 17/10** (2006.01)

CPC (source: EP US)

C12N 15/52 (2013.01 - EP); **C12P 7/18** (2013.01 - EP US); **C12P 7/44** (2013.01 - EP US); **C12P 13/001** (2013.01 - EP US); **C12P 13/005** (2013.01 - EP); **C12P 17/10** (2013.01 - EP US)

Citation (search report)

See references of WO 2013090837A2

Citation (examination)

MORENO-SÁNCHEZ R ET AL: "Experimental validation of metabolic pathway modeling. An illustration with glycolytic segments from Entamoeba histolytica", FEBS JOURNAL, WILEY-BLACKWELL PUBLISHING LTD, GB, vol. 275, no. 13, 1 July 2008 (2008-07-01), pages 3454 - 3469, XP002744571, ISSN: 1742-464X, [retrieved on 20080628], DOI: 10.1111/J.1742-4658.2008.06492.X

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DOCDB simple family (publication)

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DOCDB simple family (application)

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