

Title (en)  
MICROORGANISMS AND A METHOD FOR THE PRODUCTION OF LACTONES AND THEIR SECONDARY PRODUCTS BY CONVERTING CYCLOALKANES

Title (de)  
MIKROORGANISMEN UND VERFAHREN ZUR HERSTELLUNG VON LACTONEN UND DEREN FOLGEPRODUKTEN DURCH UMWANDLUNG VON CYCLOALKANEN

Title (fr)  
MICRO-ORGANISMES ET PROCÉDÉ DE PRODUCTION DE LACTONES ET DE LEURS PRODUITS SECONDAIRES PAR CONVERSION DE CYCLOALKANES

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Application  
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Abstract (en)  
[origin: WO2018046104A1] The present invention relates to microorganisms or progeny thereof having biosynthetic capability to convert cycloalkanes and to produce lactones using complex composed of cytochrome P450 monooxygenase, two reductases ferredoxin (Fd) and ferredoxin reductase (FdR) together with alcohol (cyclohexanol) dehydrogenase and Bayer-Villager type (cyclohexanone) monooxygenase; all from Acidovorax CHX 100. Further, secondary products can be produced which are aliphatic monomers of large industrial polymers such as w- hydroxy fatty acid, dicarboxylic acids and w-amino acids (an analogue of lactams). The invention refers further to the biotechnological production of lactones and their secondary products using the microorganisms or progeny thereof.

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