Title (en)

IMPROVEMENT OF CLOSTRIDIAL BUTANOL PRODUCTION BY GENE OVEREXPRESSION

Title (de)

VERBESSERUNG DER HERSTELLUNG VON CLOSTRIDIELLEM BUTANOL DURCH GENÜBEREXPRESSION

Title (fr)

AMÉLIORATION DE LA PRODUCTION DE BUTANOL CLOSTRIDIAL PAR SUREXPRESSION GÉNIQUE

Publication

EP 2964757 A1 20160113 (EN)

Application

EP 14708052 A 20140306

Priority

- EP 13158012 A 20130306
- EP 2014054334 W 20140306
- EP 14708052 A 20140306

Abstract (en)

[origin: EP2774986A1] The present invention relates to metabolic engineering of Clostridium acetobutylicum. A Clostridium cell with the ability to produce butanol, wherein the cell comprises a genetic modification that results in overexpression of one or more of the following genes: ## a gene encoding crotonase (crt), ## a gene encoding butyryl-CoA dehydrogenase (bcd), ## a gene encoding 3-hydroxybutyryl-CoA dehydrogenase (hbd). Overexpression of any of the two enzymes increased the speed of butanol production for at least factor of two, resulting in increase of final butanol titer for at least 28%.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2014135633A1

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