

Title (en)

STIMULATION OF BACTERIAL GROWTH BY INORGANIC PYROPHOSPHATE.

Title (de)

STIMULIERUNG DES BAKTERIELLEN WACHSTUMS DURCH ANORGANISCHE PYROPHOSPHATE.

Title (fr)

STIMULATION DE CROISSANCE BACTERIENNE PAR DU PYROPHOSPHATE INORGANIQUE.

Publication

EP 0101721 A4 19860415 (EN)

Application

EP 83901047 A 19830222

Priority

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Abstract (en)

[origin: WO8302952A1] A process for the growth of microorganisms wherein inorganic pyrophosphate is used as an energy source to generate adenosine triphosphate. Microorganisms with the enzymes acetate phosphotransferase and acetate kinase grow on a medium containing a fixed carbon source supplemented with inorganic pyrophosphate. This process can be used to overcome the problem of low growth or slow growth microorganisms used in commercial or industrial processes such as leaching of low grade pyrite ores, desulfurization of coal, conversion of biomass or cellulose to methanol, and conversion of biomass or cellulose to ethanol.

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C12N 1/38

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [AD] JOURNAL OF BACTERIOLOGY, vol. 145, no. 2, February 1981, pages 966-973; CHI-LI LIU et al.: "Comparative bioenergetics of sulfate reduction in Desulfovibrio and Desulfotomaculum spp"
- [XP] SCIENCE, vol. 217, 23rd July 1982, pages 363-364, AAAS; CHI-LI LIU et al.: "Inorganic pyrophosphate: energy source for sulfate-reducing bacteria of the genus Desulfotomaculum"
- SCIENCE, vol. 217, 23rd July 1982, pages 363-364, AAAS; CHI-LI LIU et al.: "Inorganic pyrophosphate: energy source for sulfate-reducing bacteria of the genus Desulfotomaculum"

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