



OFFICE OF ECONOMIC DEVELOPMENT

A Microorganism and a Method for Lactic Acid Production



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STATUS

- Patent Protection in Process

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OVERVIEW

Lactic acid has been an intermediate-volume specialty chemical for a wide range of food processing and industrial applications that includes pharmaceutical, cosmetics and other chemicals synthesis. Researchers at the South Dakota School of Mines & Technology have developed a unique approach to synthesizing lactic acid that has the potential to revolutionize the current process.

DESCRIPTION

The innovation is a novel method of producing an industrially important chemical, lactic acid, with high yield, high concentration and high volumetric productivity through biological fermentation utilizing a proprietary strain of bacteria and a proprietary fermentation process. As lactic acid produced through biological fermentation is utilized for many industrial applications, the present invention will significantly decrease the cost of current industrial production of lactic acid and its related purification.

ADVANTAGES

- Speed of fermentation
- Produces high yield and titers of lactic acid
- Significantly reduces the current production and purification costs

LICENSING OPPORTUNITIES

A provisional patent for this technology is currently in process. South Dakota School of Mines Office of Economic Development is actively seeking exclusive and/or nonexclusive licensing opportunities. Joint development opportunities are also available.