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(54) Title: METHOD OF PRODUCING SUCCINIC ACID AND OTHER CHEMICALS USING SUCROSE-CONTAINING FEEDSTOCK

(57) Abstract: This invention relates to the production of chemicals by fermentation with a microorganism in which the fermentation medium contains the sugar sucrose. As a specific example, succinic acid is produced from a sucrose-containing renewable feedstock through fermentation using a biocatalyst. Examples of such a biocatalyst include microorganisms that have been enhanced in their ability to utilize sucrose as a carbon and energy source. The biocatalysts of the present invention are derived from the genetic manipulation of parental strains that were originally constructed with the goal to produce one or more chemicals (for example succinic acid and/or a salt of succinic acid) at a commercial scale using feedstocks other than sucrose. The genetic manipulations of the present invention involve the introduction of exogenous genes involved in the transport and metabolism of sucrose into the parental strains. The genes involved in the transport and metabolism of sucrose can also be introduced into a microorganism prior to developing the organism to produce a particular chemical. The genes involved in the transport and metabolism of sucrose can also be used to augment or improve the sucrose transport and metabolism by strains already known to have some ability for sucrose utilization in biological fermentation.



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