

Title (en)
PROCESS FOR UTILIZATION OF GASEOUS BY-PRODUCTS FROM FERMENTATION PROCESSES

Title (de)
VERFAHREN ZUR VERWERTUNG VON GASFÖRMIGEN NEBENPRODUKTEN AUS FERMENTATIONSVERFAHREN

Title (fr)
PROCÉDÉ D'UTILISATION DE SOUS-PRODUITS GAZEUX ISSUS DE PROCÉDÉS DE FERMENTATION

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Application
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Abstract (en)
[origin: WO2020060469A1] The present invention refers to a process for the production of biofuels or fine chemicals from biomass, said process comprising the following steps a) providing a carbonaceous material originating from biomass in a form suitable for fermentation b) fermentation of carbonaceous material from step a) for production of at least one main fermentation product and a carbon dioxide containing gas c) recovering carbon dioxide containing gas from step b) and after optional purification, combining carbon dioxide containing gas with a hydrogen containing gas to form a synthesis gas containing carbon monoxide and hydrogen d) converting synthesis gas comprising carbon monoxide and hydrogen by a catalytic process to provide biofuels or biofuel components; and e) transferring heat by heat transfer at least between process steps d) and process b) and c).

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Citation (search report)
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• [X] DE 102014001933 A1 20150813 - NIEDERBACHER MICHAEL [IT]
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• [A] SEBASTIAN JUNG ET AL: "Anwendung von adsorptiven Reaktoren für die reverse Wassergas-Shift-Reaktion", CHEMIE INGENIEUR TECHNIK, WILEY VCH. VERLAG, WEINHEIM; DE, vol. 85, no. 4, 29 January 2013 (2013-01-29), pages 484 - 488, XP071141122, ISSN: 0009-286X, DOI: 10.1002/CITE.201200213
• [A] PHILIPP KAISER ET AL: "Production of Liquid Hydrocarbons with CO₂ as Carbon Source based on Reverse Water-Gas Shift and Fischer-Tropsch Synthesis", CHEMIE INGENIEUR TECHNIK, WILEY VCH. VERLAG, WEINHEIM; DE, vol. 85, no. 4, 6 March 2013 (2013-03-06), pages 489 - 499, XP071141109, ISSN: 0009-286X, DOI: 10.1002/CITE.201200179
• See references of WO 2020060469A1

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