Clean Technology

Method For Producing Bio-fuel Integrating Heat From Biomass Gasification To Drive Synthesis Gas-util

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The Invention

A low-temperature catalytic process for converting biomass (preferably glycerol recovered from the fabrication of bio-diesel) to synthesis gas (i.e., H2/CO gas mixture) in an endothermic gasification reaction is described. The synthesis gas is used in exothermic carbon-carbon bond-forming reactions, such as Fischer-Tropsch, methanol, or dimethylether syntheses. The heat from the exothermic carbon-carbon bond-forming reaction is integrated with the endothermic gasification reaction, thus providing an energy-efficient route for producing fuels and chemicals from renewable biomass resources.

Tech Fields

- Clean Technology : Biobased & renewable chemicals & fuels

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854