

METHODS AND DEVICES FOR PRODUCING BIODIESEL, DIESEL-RANGE HYDROCARBONS, AND PRODUCTS OBTAINED THEREFROM

ABSTRACT

A process for producing crude biodiesel from renewable feedstocks (such as fats, oils, and greases) containing unsaponifiable materials; purifying the crude biodiesel through a purification process; recovering a purified biodiesel distillate stream and a less volatile biodiesel residue stream; and further recovering valuable chemicals from the biodiesel residue. Specifically, the present technology relates to the concentration of valuable chemicals in the biodiesel residue product of biodiesel production and the subsequent recovery of these valuable chemicals. The process may further include the conversion of the biodiesel residue into diesel range hydrocarbons using hydrodeoxygenation and the subsequent purification of the hydrocarbon fraction produced thereby.

[No suitable figure.]