

A CONTINUOUS PROCESS AND AN APPARATUS FOR THE PREPARATION OF BIODIESEL

Abstract

The invention provides a process for the preparation of a biodiesel from a feedstock containing a triglyceride by transesterification of the triglyceride with a lower alkyl alcohol. The process comprises mixing the triglyceride with the lower alkyl alcohol in the presence of a catalyst in a high-shear mixer to form a reaction mixture, heating the reaction mixture in a heater, allowing the heated reaction mixture to react in a reactor to form a first crude transesterification product and glycerol, separating the glycerol from the first crude transesterification product and subjecting the first crude transesterification product to further treatments to obtain the biodiesel. The separation of the glycerol from the crude transesterification product is carried out in the reactor that is configured in a manner that allows the glycerol to be removed continuously from the reactor.

(Figure 1)