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(54) Title: PRODUCTION OF LUBRICANT BASE OILS BIOMASS

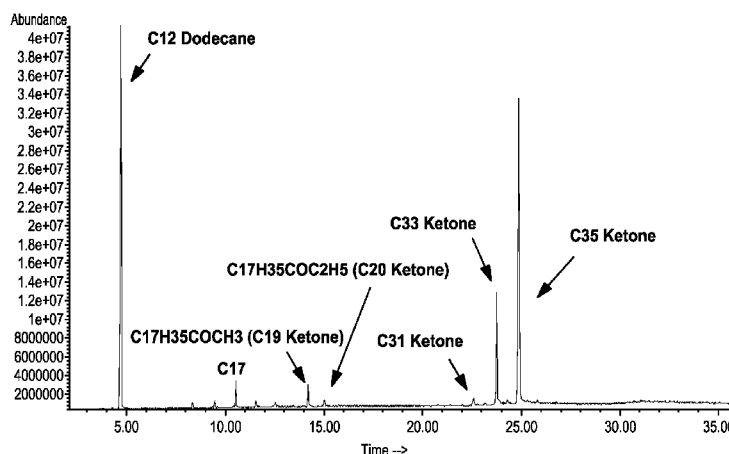


FIG. 2

(57) Abstract: Methods are provided for processing glycerides to form lubricant boiling range molecules in a single reactor and/or a single reaction zone. The glycerides are exposed to catalysts that are stable under the conditions present in the reaction zones during conversion of glycerides to fatty ketones via a coupling reaction in the presence of a first catalyst, and the subsequent deoxygenation and isomerization of the ketones in the presence of a second dewaxing catalyst. The glyceride-containing feedstock can further include free fatty acids or fatty acid derivatives that can also be used for formation of ketones and subsequent deoxygenation and isomerization. In some configuration, the processing can occur in a single reaction zone containing mixed beds of the first and second catalyst. Such configurations can be used to control the ratio of diesel boiling range molecules versus lubricant boiling range molecules generated by the methods.

