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(54) Title: PROCESS FOR CONVERSION OF BIOMASS TO FUEL

(57) Abstract: The present invention is directed to processes for the direct conversion of lipidic biomass fuelstock to combustible fuels. In particular, the invention provides a process for the direct conversion of animal fats to transportation fuels suitable as replacement for petroleum-derived transportation fuels. In one embodiment, the method comprises the steps of hydrolyzing a lipidic biomass to form free fatty acids, catalytically deoxygenating the free fatty acids to form *n*-alkanes, and reforming at least a portion of the *n*-alkanes into a mixture of compounds in the correct chain length, conformations, and ratio to be useful transportation fuels. Particularly, the product prepared according to the invention comprises mixtures of hydrocarbon compounds selected from the group consisting of *n*-alkanes, isoalkanes, aromatics, cycloalkanes, and combinations thereof.



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