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(71) Applicant: REG SYNTHETIC FUELS, LLC [US/US];

416 S. Bell Avenue, Ames, Iowa 50010 (US).

(72) Inventors: **ABHARI, Ramin**; 11229 S. 67th East Ct., Bixby, Oklahoma 74008 (US). **HAVERLY, Martin**; 2304 Lakeview Drive, Ames, Iowa 50010 (US). **BERG, Mason**; 109 4th Street NW, Altoona, Iowa 50009 (US). **SLADE, David A.**; 412 26th Street, Ames, Iowa 50010 (US). **TOMLINSON, H. Lynn**; P.O. Box 226, Leonard, Oklahoma 74043 (US). **FISHER, Trevor**; 11402 S. 69th E. Ave., Bixby, Oklahoma 74008 (US).

(74) Agent: **MCPARLAND, James P.** et al.; Foley & Lardner LLP, 3000 K Street N.W., Suite 600, Washington, District of Columbia 20007 (US).

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(54) Title: PROCESS FOR BIORENEWABLE LIGHT PARAFFINIC KEROSENE AND SUSTAINABLE AVIATION FUEL

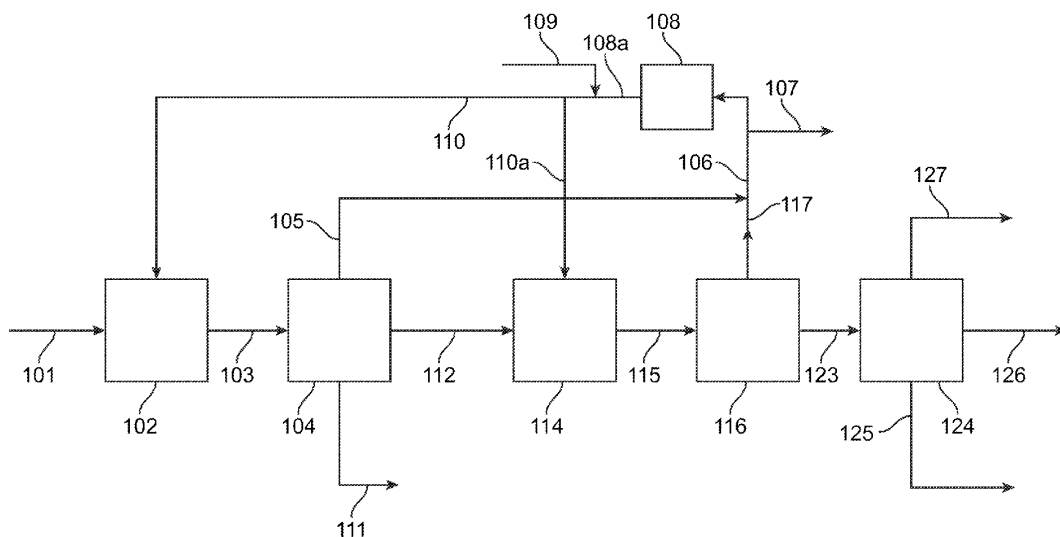


FIG. 1

(57) Abstract: The present disclosure relates to biofuels, and more particularly, to biomass-based kerosene and aviation turbine fuels. In an aspect, a method is disclosed for producing a light paraffinic kerosene (LPK) where the method includes hydrotreating a biorenewable feedstock to yield a heavy hydrotreater fraction comprising C14-C24 n-paraffins; hydroisomerizing and hydrocracking the heavy hydrotreater fraction with a hydroisomerization catalyst under conditions yielding a hydroisomerizer product that includes a heavy hydroisomerizer fraction and the LPK; and separating the LPK from the hydroisomerizer product. The LPK provided by the method has an existent gum value of 7 mg/100 mL or less as measured according to IP 540 air evaporation method and further includes (a) a weight ratio of isoparaffins to n-paraffins of about 2: 1 or greater, or (b) no detectable hydrocarbons with 14 or more carbon atoms as measured by gas chromatography, or (c) a weight ratio of isoparaffins to n-paraffins of about 2: 1 or greater and no detectable

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hydrocarbons with 14 or more carbon atoms as measured by gas chromatography.