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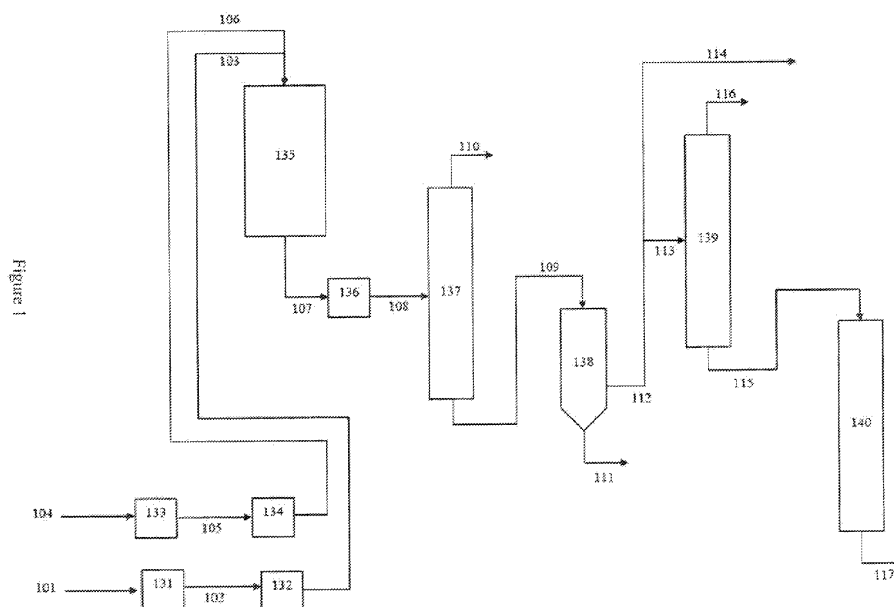
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(54) Title: METHOD OF PROCESSING A BIO-BASED MATERIAL AND APPARATUS FOR PROCESSING THE SAME



(57) Abstract: The present invention relates to a method for processing a renewable bio-based material comprising the step of reacting the bio-based material with hydrogen in the presence of a catalyst on a support in a reactor to form a treated oil; (i) passing the treated oil through a distillation unit and an adsorption unit to form green diesel; and/or (ii) passing the treated oil through at least one distillation column to separate the treated oil into at least one component and passing the at least one component through an adsorption column; and wherein the reactor comprises a cooling function for controlling the temperature of the reactor; wherein the cooling function is at least one of an internal cooling function and an external cooling function.

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