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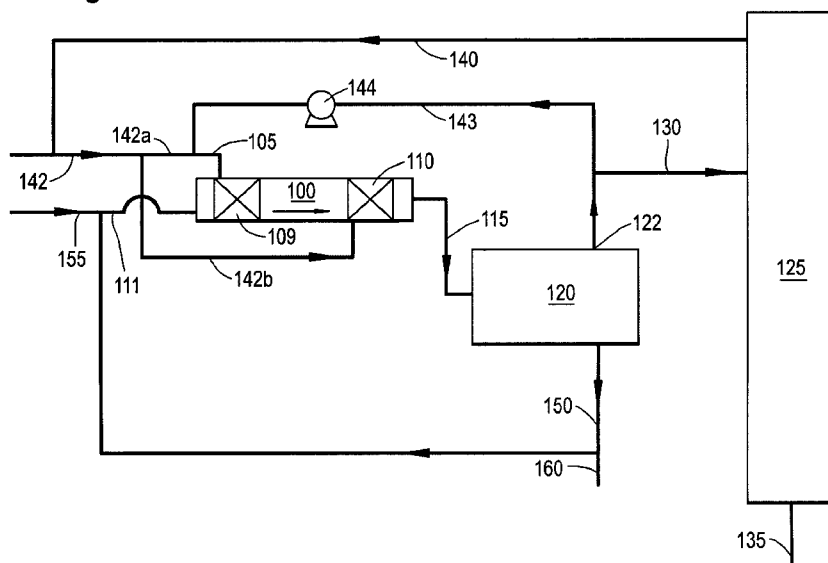
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(54) **Title:** PROCESS FOR PREPARING AN ALKYLATE

Fig.1



(57) **Abstract:** The present invention provides a process for preparing an alkylate, comprising: contacting in a reaction zone a hydrocarbon mixture comprising at least isoparaffin and an olefin with an acidic ionic liquid catalyst under alkylation conditions to obtain an alkylate; withdrawing an alkylate-comprising effluent from the reaction zone; separating at least part of the alkylate-comprising effluent into a hydrocarbon-rich phase and an ionic liquid catalyst-rich phase; fractionating part of the hydrocarbon-rich phase into at least an alkylate-comprising product and an isoparaffin-comprising stream; mixing another part of the hydrocarbon-rich phase with an olefin-comprising stream to form the hydrocarbon mixture; and providing the hydrocarbon mixture to the reaction zone.



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