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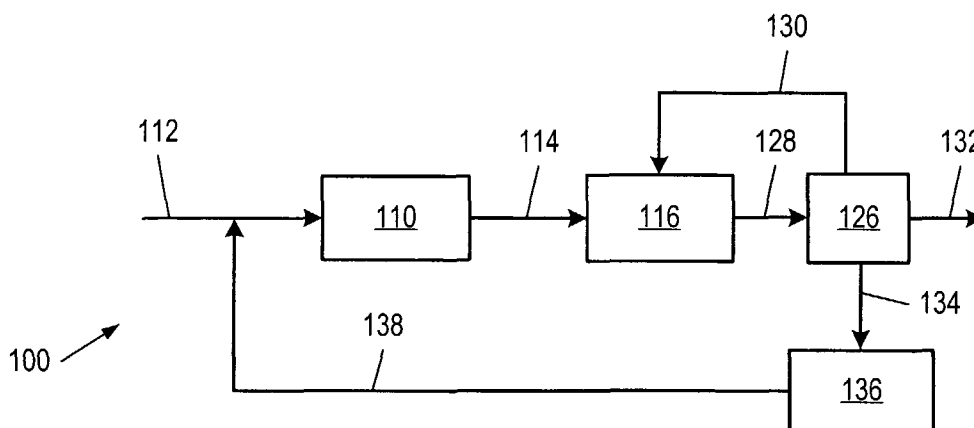
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(54) **Title**: PREPARATION OF BRANCHED ALIPHATIC ALCOHOLS USING A PROCESS STREAM FROM AN ISOMERIZATION UNIT WITH RECYCLE TO A DEHYDROGENATION UNIT



(57) **Abstract**: Systems and methods to produce branched aliphatic alcohols are described. Systems include at least an olefin isomerization unit, a hydroformylation unit, a dehydrogenation unit. Methods for producing branched aliphatic alcohols include isomerization of olefins in a process stream. The isomerized olefins are hydroformylated to produce aliphatic alcohols. After hydroformylation of the aliphatic alcohols, unreacted components from the hydroformylation process may be separated from the aliphatic alcohols products. The unreacted components from the hydroformylation process are introduced into a dehydrogenation unit to form an olefinic hydrocarbon stream, which is recycled back into the main process stream. Addition of multiple streams to the units may be performed to control reaction conditions in the units.

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