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(54) Title: PREPARATION OF BRANCHED ALIPHATIC ALCOHOLS USING A PROCESS STREAM FROM A DEHYDROGENATION-ISOMERIZATION UNIT

(57) Abstract: Systems and methods to produced branched aliphatic alcohols are described. Systems may include a dehydrogenation-isomerization unit and a hydroformylation unit. Methods for producing branched aliphatic alcohols may include isomerization of olefins in a process stream. The isomerized olefins may be 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 may be recycled back into the main process stream or sent to other processing units. Addition of multiple streams to the dehydrogenation-isomerization unit and/or hydroformylation unit may be performed to control reaction conditions in the units.

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