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(54) Title: PREPARATION OF BRANCHED ALIPHATIC ALCOHOLS USING COMBINED PROCESS STREAMS FROM A HYDROGENATION UNIT AND A DEHYDROGENATION-ISOMERIZATION UNIT

(57) Abstract: Systems and methods to produced branched aliphatic alcohols are described. Systems may include a hydrogenation unit, a dehydrogenation-isomerization unit, a hydroformylation unit and/or combinations thereof. 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 units may be performed to control reaction conditions in the units.



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