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(54) Title: PROCESS FOR THE PREPARATION OF A HIGHLY LINEAR ALCOHOL COMPOSITION

(57) Abstract: Process for the preparation of a highly linear alcohol composition comprising the steps of: (a) reacting carbon monoxide with hydrogen under Fischer-Tropsch reaction conditions in the presence of a Fischer-Tropsch catalyst comprising cobalt; (b) separating from the product of step (a) at least one hydrocarbon fraction comprising between 10 and 50% by weight of olefins containing 6 or more carbon atoms; (c) contacting one or more of the hydrocarbon fractions obtained in step (b) with carbon monoxide and hydrogen under hydroformylation conditions in the presence of a hydroformylation catalyst based on a source of cobalt and one or more alkyl phosphines; and (d) recovering the alcohol composition. Alcohol composition comprising C12/C13 linear primary mono-alcohols and C12/C13 iso-alcohols, wherein the weight ratio C12 linear primary alcohol to C13 linear primary alcohol is in the range of from 0.5 to 2.0. Alcohol composition comprising C14/C15 linear primary mono-alcohols and C14/C15 iso-alcohols, wherein the weight ratio C14 linear primary alcohol to C15 linear primary alcohol is in the range of from 1.0 to 3.0.



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