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(54) Title: HYDROFORMYLATION PROCESS

(57) Abstract: A process for the production of 4-hydroxybutyraldehyde is described. The process comprises reacting allyl alcohol with a mixture of carbon monoxide and hydrogen in the presence of a solvent and a catalyst comprising a rhodium complex and a diphosphine. The diphosphine is a trans-1,2-bis(bis(3,4-di-n-alkylphenyl)phosphinomethyl)cyclobutane and/or a 2,3-O-isopropylidene-2,3-dihydroxy-1,4-bis[bis(3,4-di-n-alkylphenyl)phosphino] butane. The process gives high yield of 4-hydroxybutyraldehyde compared to 3-hydroxy-2-methylpropionaldehyde.



WO 2010/132087 A1