

Title (en)
HOMOGENEOUS BIMETALLIC HYDROFORMYLATION CATALYSTS AND PROCESSES UTILIZING THESE CATALYSTS FOR CONDUCTING HYDROFORMYLATION REACTIONS.

Title (de)
HOMOGENE BIMETALLISCHE HYDROFORMYLIERUNGSKATALYSATOREN UND HYDROFORMYLIERUNGSVERFAHREN, WELCHE SOLCHE KATALYSATOREN GEBRAUCHEN.

Title (fr)
CATALYSEURS HOMOGENES BIMETALLIQUES D'HYDROFORMYLATION, ET PROCEDES UTILISANT CES CATALYSEURS POUR MENER DES REACTIONS D'HYDROFORMYLATION.

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Application
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Abstract (en)
[origin: WO9420510A1] Novel homogeneous bimetallic hydroformylation catalysts, and processes utilizing these catalysts to convert alkenes, particularly alpha olefins, under mild conditions to a product rich in aldehydes, particularly a product containing a high ratio of linear: branched chain aldehydes. The catalysts can be produced from a binucleating tetratertiaryphosphine ligand capable of strongly coordinating two metal centers and holding them in general proximity to one another. Bimetallic catalyst precursors are produced which, on reaction with carbon monoxide and hydrogen, forms the active bimetallic hydroformylation catalyst system. This invention also relates to asymmetric synthesis in which a prochiral or chiral compound is contacted in the presence of an optically pure metal-ligand complex catalyst, in enantiomeric form, to produce an optically active product.

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