polysiloxane column, a flame ionization detector, an injection temperature of 200°C, an initial column temperature of 90°C for two minutes, followed by heating to 270°C at a rate of 8°C per minute and a detector temperature of 300°C.

5559262

PROCESS FOR THE PREPARATION OF RUTHENIUM COMPLEXES AND THEIR IN SITU USE AS HYDROGENATION CATALYSTS

Beatty Richard P; Paciello Rocco A Newark, DE, UNITED STATES assigned to E I Du Pont de Nemours and Company

This invention relates to a process of preparing a ruthenium complex of the formula RuH2(PR3)2L2 wherein PR3 is an organophosphoms ligand and L is H2 or PR3; a catalyst comprising at least one ruthenium complex having the formula RuH2(PR3)L13 wherein L1 is a neutral electron pair donor ligand; a process for preparing the catalyst and its use in situ in the hydrogenation of nitriles.

5559277

PROCESS FOR PREPARING BIPHENYLS USING PALLADACYCLES AS CATALYSTS

Beller Matthia; Herrmann Wolfgang A; Brossmer Christop Niedernhausen, GERMANY assigned to Hoechst AG

The invention relates to a process for preparing biphenyls of the formula (I) (*See Patent for Chemical Structure*) (I) where R1a to R10a are, independently of one another, hydrogen, C1-C12-alkyl, C1-C12-alkenyl, C1-C12-alkynyl, alkoxy-(C1-C12), acyloxy-(C1-C12), O-phenyl, aryl, heteroaryl, fluorine, chlorine, OH, NO2, CN, COOH, CHO, SO3H, SO2R, SOR, NH2, NH-alkyl-(C1-C12), N-alkyl2-(C1-C12), C-Hal3, NHCO-alkyl-(C1-C8), CONH-alkyl-(C1-C4), CON-(alkyl)2-(C1-C4), COO-alkyl-(C1-C12), CONH2, CO-alkyl-(C1-C12), NHCOH, NHCOO-alkyl-(C1-C8),CO-phenyl, COO-phenyl, CHCHCO2-alkyl-(C1-C12), CHCHCO2H, PO-phenyl2, PO-alkyl2-(C1-C8), by reaction of haloaromatics or aryl sulfonates of the formula (II) (*See Patent for Chemical Structure*) (II) with arylboron derivatives of the formula III (*See Patent for Chemical Structure*) (III) where R1a to R10a are as defined above and X is bromine, chlorine or OSO2CF3, OSO2-aryl, OSO2-alkyl and Y is B(OH)2, B(O-alkyl)2, B(O-aryl)2, wherein a palladium compound of the formula (IV) (*See Patent for Chemical Structure*) (IV) where R1, R2, R3, R4, R5,R6 are, independently of one another, hydrogen, (C1-C4)-alkyl, (C5-C8)-cycloalkyl, (C1-C4)-alkoxy, fluorine, NH2, NH-alkyl(C1-C4), N(alkyl)2-(C1-C4), CO2-alkyl-(C1-C4), OCO-alkyl-(C1-C4) or phenyl, or R1 and R2, R2 and R3, R3 and R4, R5 and R6 together form an aliphatic or aromatic ring, and R7, R8 are (C1-C8)-alkyl, (C3-C12)-cycloalkyl, substituted or unsubstituted aryl and Y is an anion of an inorganic or organic acid, is used as catalyst.

ENATIOSELECTIVE CATALYSIS

5552548

ENANTIOSELECTIVE OXAZABOROLIDINE CATALYSTS

Quallich George J North Stonington, CT, UNITED STATES assigned to Pfizer Inc

The borane reduction of prochiral ketones to optically pure alcohols is effectively achieved by the utilization of catalytic amounts of the new and valuable oxazaborolidine catalysts of formula (I). (*See Patent for Chemical Structure*) (I).