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(54) Title: PROCESS FOR THE CARBONYLATION OF ETHYLENICALLY OR ACETYLENICALLY UNSATURATED COM-
POUNDS

(57) Abstract: A process for the carbonylation of unsaturated compounds by contacting the unsaturated compound with carbon
monoxide in the presence of a catalyst system comprising: (a) a source of palladium and/or platinum; and (e) an unsymmetrical
bidentate diphosphine ligand of formula (I), $R^1R^2 > P^1 - R^3 - P^2 < R^4R^5$ (I) wherein P^1 and P^2 represent phosphorus atoms; R^3
represents a divalent organic bridging group; and R^1 , R^2 , R^4 and R^5 each individually, or R^1 and R^2 jointly, and/or R^4 and R^5 jointly
represent organic groups that are covalently linked to the phosphorus; and wherein R^1 , R^2 , R^4 and R^5 are chosen in such way, that
the phosphino group $R^1R^2 > P^1$ differs from the phosphino group $P^2 < R^4R^5$.



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