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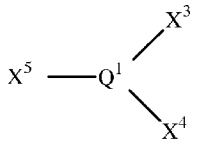
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(54) **Title:** A PROCESS FOR THE CARBONYLATION OF AN ETHYLENICALLY UNSATURATED COMPOUND AND A CATALYST SYSTEM



(I)

(57) **Abstract:** A process for the carbonylation of an ethylenically unsaturated compound comprising the step of reacting said compound with carbon monoxide in the presence of a co- 5 reactant having a mobile hydrogen atom and a catalyst system is described. The catalyst system is obtainable by combining: (a) a metal of Group 8, 9 or 10 or a suitable compound thereof; (b) a ligand of general formula (I): and c) optionally, a source of anions. The invention is characterised in that the catalyst system includes an enhancer compound comprising an aromatic ring or ring system substituted by at least one hydroxyl group wherein the hydroxyl group pKa at 25°C is greater than 3.0 and less than 9.1, the said enhancer compound excluding 3- quinolinol. Catalyst systems for use with the enhancer compound are described as are a method of increasing the efficacy of a catalyst system for the carbonylation of ethylenically unsaturated compounds and a method of increasing the rate of carbonylation of an ethylenically unsaturated compound comprising the step of adding such a compound to the reaction.

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