

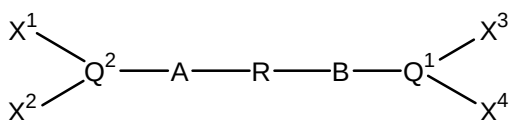
**Process for the Carbonylation of Ethylenically Unsaturated Compounds,
Novel Carbonylation Ligands and Catalyst Systems incorporating such
Ligands**

5 **ABSTRACT**

A novel bidentate catalytic ligand of general formula (I)

(I)

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is described. R represents a hydrocarbyl aromatic structure having at least one aromatic ring to which Q^1 and Q^2 are each linked, via the
 15 respective linking group, if present, on available adjacent atoms of the at least one aromatic ring. The groups X^3 and X^4 represent radicals joined via tertiary carbon atoms to the respective atom Q^1 and the groups X^1 and X^2 represent radicals joined via primary, or substituted aromatic ring carbon atom(s) to the respective atom Q^2 . A
 20 and B represent an optional lower alkylene linking group. Q^1 and Q^2 each represent phosphorus, arsenic or antimony. A process for the carbonylation of ethylenically unsaturated compounds comprising reacting the compound with carbon monoxide in the presence of a source of hydroxyl groups, optionally, a source of anions and
 25 catalyst system obtainable by combining a metal of Group 8, 9 or 10 or a compound thereof and the bidentate ligand of general formula (I) is also described.

No Figure

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