

A B S T R A C T

A PROCESS FOR THE PREPARATION OF A LINEAR ALTERNATING
COPOLYMER OF CARBON MONOXIDE WITH ETHENE AND ANOTHER
OLEFINICALLY UNSATURATED COMPOUND

A process for the preparation of a linear alternating copolymer of carbon monoxide with ethene and another olefinically unsaturated compound (A) wherein a copolymer of which the molar ratio (r_1) of the monomer units originating in the olefinically unsaturated compound A to the monomer units originating in ethene is in the range of from 1:100 to 1:3, is prepared by contacting the monomers in the presence of a liquid diluent with a catalyst composition which is based on

(a) a source of a Group VIII metal, and

(b) a bidentate ligand of the general formula

$R^1R^2M^1-R-M^2R^3R^4$ (I) wherein M^1 and M^2 independently represent a phosphorus, arsenic or antimony atom, R^1 , R^2 , R^3 and R^4 independently represent unsubstituted or substituted aryl groups and R represents a bivalent bridging group which consists of three atoms in the bridge of which the middle atom is a tetravalent atom which carries two monovalent substituents R^5 and R^6 consisting of carbon, hydrogen and optionally oxygen, and the two outer bridging atoms are carbon atoms, while the quotient r_2/r_1 is less than 24, in which quotient r_1 is as defined hereinbefore and r_2 is the molar ratio of the olefinically unsaturated compound A to ethene in the liquid phase.