

Title (en)  
METHOD FOR THE CARBONYLATION OF PENTENOIC ACID AND DERIVATIVES THEREOF

Title (de)  
VERFAHREN ZUR CARBONYLIERUNG VON PENTENSAEURE UND DEREN DERIVATE

Title (fr)  
PROCEDE DE CARBONYLATION D'ACIDE PENT NO QUE ET DE SES DERIVES

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Application  
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Abstract (en)  
[origin: WO0246143A1] The invention relates to a method for the carbonylation of n-pentenoic acid or derivatives thereof of formula (I), wherein R<1> represents CN or COOR<2> and R<2> represents hydrogen, alkyl or aryl. According to said method, a compound of formula (I) is reacted with carbon monoxide and a compound (II) containing a hydroxyl group in the presence of a catalyst system. The method is characterised in that the catalyst system is obtained by reacting a) a source of a metallic ion of a metal (III) of the 8<th> subgroup of the periodic table with b) a bidentate phosphine ligand of formula (IV), wherein R<3>, R<4>, R<5>, R<6>, R<7>, R<8>, R<9>, R<10>, R<11>, R<12>, R<13> and R<14> independently of one another represent an inorganic group, which contains a respective carbon atom, by means of which the respective group is linked to the relevant tertiary carbon atom given in formula (IV), L<1>, L<2> represent independently of one another a lower alkylene group and X represents an arylene group.

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