Title (en)

PROCESS FOR THE CARBONYLATION OF ETHYLENICALLY UNSATURATED COMPOUNDS, BIDENTATE DIPHOSPHINE COMPOSITION USED IN THIS PROCESS AND PROCESSES FOR PREPARATION OF THIS BIDENTATE DIPHOSPHINE COMPOSITION

Title (de)

VERFAHREN ZUR CARBONYLIERUNG VON ETHYLENISCH UNGESÄTTIGTEN VERBINDUNGEN, IN DIESEM VERFAHREN VERWENDETE ZWEIZÄHNIGE DIPHOSPHINZUSAMMENSETZUNG UND VERFAHREN ZUR PRÄPARATION DIESER ZWEIZÄHNIGEN DIPHOSPHINZUSAMMENSETZUNG

Title (fr)

PROCEDE DE CARBONYLATION DE COMPOSES A INSATURATION ETHYLENIQUE, COMPOSITION DE DIPHOSPHINE BIDENTATE UTILISEE DANS CE PROCEDE ET PROCEDES DE PREPARATION DE CETTE COMPOSITION DE DIPHOSPHINE BIDENTATE

Publication

EP 1358009 A2 20031105 (EN)

Application

EP 02724159 A 20020131

Priority

- EP 02724159 A 20020131
- EP 0201036 W 20020131
- EP 01300866 A 20010131

Abstract (en)

[origin: WO02064250A2] Process for the carbonylation of optionally substituted ethylenically unsaturated compounds by reaction with carbon monoxide and a coreactant in the presence of a catalyst system. The catalyst system includes (a) a source of Pt group metal cations, (b) a bidentate diphosphine composition. More than 60% w/w of bidentate diphosphine present in the bidentate diphosphine composition has the general formula (II) X<1>-R-X<2> wherein X<1> and X<2 >independently represent an optionally substituted symmetrical phosphabicycloalkyl group, having at least 5 ring atoms; and R represents a bivalent organic bridging group, connecting both phosphorus atoms. Bidentate diphosphine composition wherein more than 60% w/w of bidentate diphosphine present has the general formula (II)) X<1>-R-X<2 > wherein X<1> and X<2 >independently represent an optionally substituted symmetrical phosphabicycloalkyl group, having at least 5 ring atoms; and R represents a bivalent organic bridging group, connecting both phosphorus atoms, with the proviso that the bidentate diphosphine is not 1,3-PP'bis(9-phosphabicyclo[3.3.1]nonyl)propane. In addition methods to prepare such a bidentate diphosphine composition are described.

IPC 1-7

B01J 31/24; B01J 31/28; C07F 9/6568; C07C 45/50; C07C 29/16; C07F 9/50

IPC 8 full level

B01J 31/26 (2006.01); **B01J 31/24** (2006.01); **B01J 31/28** (2006.01); **C07B 61/00** (2006.01); **C07C 29/16** (2006.01); **C07C 45/49** (2006.01); **C07C 45/50** (2006.01); **C07C 47/02** (2006.01); **C07F 9/50** (2006.01); **C07F 9/6568** (2006.01); B01J 23/42 (2006.01)

CPC (source: EP)

B01J 31/248 (2013.01); **C07C 45/49** (2013.01); **C07C 45/50** (2013.01); **C07F 9/5072** (2013.01); **C07F 9/5095** (2013.01); **C07F 9/65683** (2013.01); B01J 23/42 (2013.01); B01J 2231/321 (2013.01); B01J 2531/82 (2013.01); B01J 2531/828 (2013.01)

C-Set (source: EP)

C07C 45/50 + **C07C 47/02**

Citation (search report)

See references of WO 02064250A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 02064250 A2 20020822; **WO 02064250 A3 20030130**; AU 2002254887 A1 20020828; CA 2436215 A1 20020822; CN 1535180 A 20041006; EP 1358009 A2 20031105; JP 2004527484 A 20040909; ZA 200305228 B 20040513

DOCDB simple family (application)

EP 0201036 W 20020131; AU 2002254887 A 20020131; CA 2436215 A 20020131; CN 02804384 A 20020131; EP 02724159 A 20020131; JP 2002564038 A 20020131; ZA 200305228 A 20030707