

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 February 2007 (22.02.2007)

PCT

(10) International Publication Number
WO 2007/020379 A1

(51) International Patent Classification:
B01J 31/24 (2006.01) **C07C 51/14** (2006.01)

(21) International Application Number:
PCT/GB2006/002915

(22) International Filing Date: 4 August 2006 (04.08.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0516556.8 12 August 2005 (12.08.2005) GB

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVED CATALYST SYSTEM

(57) Abstract: A continuous carbonylation process for high turnover carbonylation, and a carbonylation reaction medium and product stream thereof. The process comprises carbonylating an ethylenically unsaturated compound with carbon monoxide in the presence of a source of hydroxyl groups and a catalyst system. The catalyst system comprising: (a) a bidentate phosphine, arsine or stibine ligand; and (b) a catalytic metal selected from a group VIB or group VIIB metal or a compound thereof. The catalytically active concentration of said catalytic metal, measured as the ACCF (product Kg . hr⁻¹ . Dm⁻³), is maintained at less than 0.5.



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