(2004073631)

10/12/04

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 03/106020 A1

(51) International Patent Classification[7]: B01J 23/44, 23/50, C07C 5/08

(21) International Application Number: PCT/US03/18284

(22) International Filing Date: 10 June 2003 (10.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/388,307 14 June 2002 (14.06.2002) US

(71) Applicant: CHEVRON PHILLIPS CHEMICAL COMPANY LP [US/US]; 10001 Six Pines Drive, The Woodlands, TX 77380 (US).

(72) Inventors: CHEUNG, Tin-Tack, Peter; 5111 Maple Hill Trail, Kingwood, TX 77354 (US). BERGMEISTER, Joseph, J., III; 3618 Purple Meadow Lane, Kingwood, TX 77345 (US).

(74) Agent: REED, K., Karan; Chevron Phillips Chemical Company LP, 10001 Six Pines Drive, The Woodlands, TX 77380 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (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.

162162

ACTION

WO 03/106020 A1

(54) Title: HYDROGENATION PALLADIUM-SILVER CATALYSTS AND METHODS FOR THEIR PREPARATION

(57) Abstract: A catalyst composition comprising palladium, silver and a support material (preferably alumina) is contacted with a liquid composition comprising an iodide component such as ammonium iodide, and the catalyst is then calcined. An improved process for hydrogenation, especially selectively hydrogenating acetylene (to ethylene), using this improved catalyst composition with improved conversion and deactivation.