

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 September 2003 (04.09.2003)

PCT

(10) International Publication Number
WO 2003/072246 A3

- (51) International Patent Classification⁷: **B01J 23/66**, 35/10, 37/00, C07D 301/10, C07C 29/10, 213/04
- (21) International Application Number:
PCT/US2003/005902
- (22) International Filing Date: 25 February 2003 (25.02.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/360,060 25 February 2002 (25.02.2002) US
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- (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, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, 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, 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
- (88) Date of publication of the international search report:
8 January 2004
- 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: SUPPORTED SILVER CATALYST AND AN EPOXIDATION PROCESS USING THE CATALYST

(57) Abstract: A catalyst which comprises a carrier and silver deposited on the carrier, which carrier has a surface area of at least 1 m²/g, and a pore size distribution such that pores with diameters in the range of from 0.2 to 10 µm represent at least 70 % of the total pore volume and such pores together provide a pore volume of at least 0.27 ml/g, relative to the weight of the carrier; a process for the preparation of a catalyst which process comprises depositing silver on a carrier, wherein the carrier has been obtained by a method which comprises forming a mixture comprising: a) from 50 to 90 %w of a first particulate a-alumina having an average particle size (d₅₀) of from more than 10 up to 100 µm; and b) from 10 to 50 %w of a second particulate a-alumina having an average particle size (d₅₀) of from 1 to 10 µm; %w being based on the total weight of a-alumina in the mixture; and shaping the mixture into formed bodies and firing the formed bodies to form the carrier, and a process for the epoxidation of an olefin, which process comprises reacting an olefin with oxygen in the presence of a said catalyst.

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