

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 January 2007 (11.01.2007)

PCT

(10) International Publication Number
WO 2007/005317 A3

(51) International Patent Classification:
C07C 2/68 (2006.01)

LLC, 25 East Algonquin Road, P.O. Box 5017, Des
Plaines, Illinois 60017-5017 (US).

(21) International Application Number:
PCT/US2006/024305

(74) Common Representative: UOP LLC; 25 East Algonquin
Road, P.O. Box 5017, Des Plaines, Illinois 60017-5017
(US).

(22) International Filing Date: 22 June 2006 (22.06.2006)

(25) Filing Language: English

(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.

(26) Publication Language: English

(30) Priority Data:
11/170,420 29 June 2005 (29.06.2005) US

(71) Applicant (for all designated States except US): UOP
LLC [US/US]; 25 East Algonquin Road, P.O. Box 5017,
Des Plaines, Illinois 60017-5017 (US).

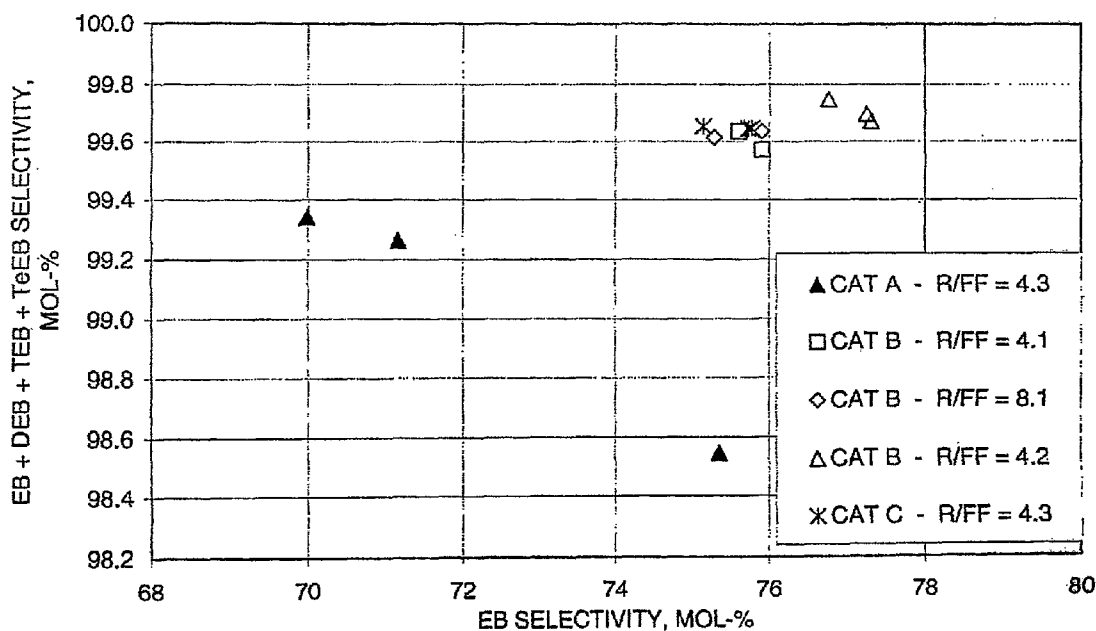
(72) Inventors; and

(75) Inventors/Applicants (for US only): JAN, Deng-Yang
[US/US]; UOP LLC, 25 East Algonquin Road, P.O. Box
5017, Des Plaines, Illinois 60017-5017 (US). JOHNSON,
James, A. [US/US]; UOP LLC, 25 East Algonquin Road,
P.O. Box 5017, Des Plaines, Illinois 60017-5017 (US).
SCHMIDT, Robert, J. [US/US]; UOP LLC, 25 East
Algonquin Road, P.O. Box 5017, Des Plaines, Illinois
60017-5017 (US). WOODLE, Guy, B. [US/US]; UOP

(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).

[Continued on next page]

(54) Title: ALKYLATION PROCESS USING UZM-8 ZEOLITE



(57) Abstract: A process for the alkylation of aromatics with olefins using a solid catalyst bed containing UZM-8 zeolite is disclosed. A polyalkylated aromatic is passed to the catalyst bed to reduce the concentration of the olefin at alkylation conditions. A portion of the effluent recovered from the catalyst bed may be recycled to the catalyst bed. Such operation can decrease the catalyst deactivation rate and the formation of diphenylalkanes. The process disclosed herein is applicable to processes for the production of a wide variety of commercially important alkylated aromatics, including ethylbenzene and cumene.

WO 2007/005317 A3



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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.

(88) Date of publication of the international search report:

12 April 2007