

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
25 February 2010 (25.02.2010)

PCT

(10) International Publication Number
WO 2010/021909 A3

(51) International Patent Classification:

C07C 15/02 (2006.01) *C07C 11/04* (2006.01)
C07C 2/42 (2006.01) *C07C 15/06* (2006.01)
C07C 4/06 (2006.01) *C07C 15/08* (2006.01)

(21) International Application Number:

PCT/US2009/053703

(22) International Filing Date:

13 August 2009 (13.08.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/089,936 19 August 2008 (19.08.2008) US

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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD,
SE, SG, SK, SL, SM, ST, SV, 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, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

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

29 April 2010

(54) Title: PROCESS FOR THE CONVERSION OF LOWER ALKANES TO ETHYLENE AND AROMATIC HYDROCARBONS

(57) Abstract: The present invention provides an integrated process for producing ethylene and aromatic hydrocarbons, specifically benzene, which comprises: (a) introducing a mixed lower alkane feed into a cracker to produce a product mixture which is comprised of ethylene and C₃₊ products and possibly unreacted ethane, (b) separating and recovering ethylene, (c) contacting the C₃₊ products and any unreacted ethane with an aromatic hydrocarbon conversion catalyst to produce a product mixture which is comprised of aromatic reaction products including benzene, and (d) recovering benzene and any other aromatic reaction products.



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