



(51) International Patent Classification:

C07C 11/06 (2006.01) *C07C 15/04* (2006.01)
C07C 15/02 (2006.01)

(21) International Application Number:

PCT/US2011/033059

(22) International Filing Date:

19 April 2011 (19.04.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/767,080 26 April 2010 (26.04.2010) 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, TH, 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, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: A PROCESS FOR PRODUCING PROPYLENE AND AROMATICS FROM BUTENES BY METATHESIS AND AROMATIZATION

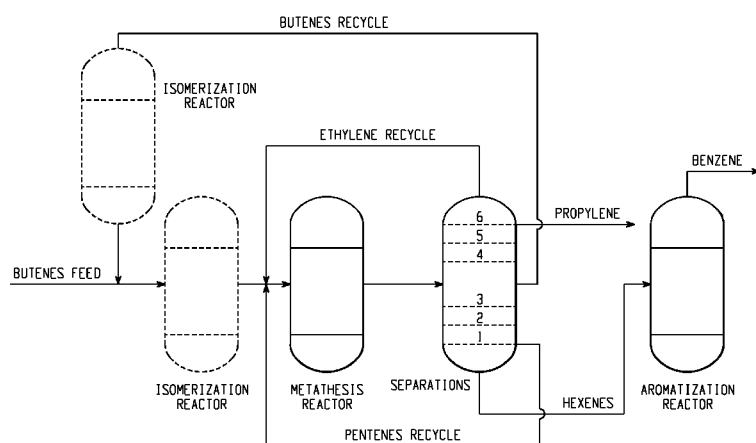


Fig. 1

(57) Abstract: The invention is for a process for producing propylene and hexene (along with ethylene, pentenes, product butenes, heptenes and octenes) by metathesis from butenes (iso-, 1- and cis and trans 2-) and pentenes and then aromatizing the hexenes (along with higher olefins, such as heptenes and octenes) to benzene (along with toluene, xylenes, ethylbenzene and styrene). Since the desired products of the metathesis reaction are propylene and hexene, the feed to the metathesis reaction has a molar ratio for 1-butene:2-butene which favors production of propylene and 3-hexene with the concentration of hexenes and higher olefins in the metathesis product being up to 30 mole%. An isomerization reactor may be used to obtain the desired molar ratio of 1-butene:2-butene for the feed composition into the metathesis reactor. After the metathesis reaction, of hexene and higher olefins are separated for aromatization to benzene and other aromatics.



— *as to the applicant's entitlement to claim the priority of
the earlier application (Rule 4.17(iii))*

Published:

— *with international search report (Art. 21(3))*