



(43) International Publication Date
5 July 2012 (05.07.2012)

(10) International Publication Number
WO 2012/092014 A2

(51) International Patent Classification:

B01J 23/30 (2006.01) **C07C 11/06** (2006.01)
C07C 11/04 (2006.01) **C07C 2/08** (2006.01)
C07C 11/08 (2006.01)

(21) International Application Number:

PCT/US2011/066065

(22) International Filing Date:

20 December 2011 (20.12.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/427,884	29 December 2010 (29.12.2010)	US
61/427,893	29 December 2010 (29.12.2010)	US
13/156,860	9 June 2011 (09.06.2011)	US
13/156,918	9 June 2011 (09.06.2011)	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, QA, RO, RS, RU, RW, 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, RW, 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).

Published:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: OLEFIN METATHESIS PROCESS AND CATALYST CONTAINING TUNGSTEN FLUORINE BONDS

(57) Abstract: A process and catalyst for the metathesis of olefins in general and specifically for the production of propylene from ethylene and butylene has been developed. The catalyst comprises a tungsten metal compound, which contains at least one tungsten-fluoro bond, dispersed or grafted onto a support. A specific example of the catalyst is the compound $\text{WOF}(\text{CH}_2\text{CMe}_3)_3$ grafted onto a silica support.



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