



(51) International Patent Classification:

B01J 31/14 (2006.01) *B01J 31/02* (2006.01)
B01J 31/12 (2006.01)

(21) International Application Number:

PCT/IB2015/055333

(22) International Filing Date:

14 July 2015 (14.07.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/026,123 18 July 2014 (18.07.2014) US

(71) Applicant: **SABIC GLOBAL TECHNOLOGIES B.V.**
[NL/NL]; Plasticslaan 1, NL-4612 PX Bergen op Zoom
(NL).

(72) Inventors: **AZAM, Shahid**; PO Box 5101, Riyadh, 11422
(SA). **BAWARETH, Bander**; PO Box 5101, Riyadh,
11422 (SA). **AL-HAZMI, Mohammed H.**; PO Box 5101,
Riyadh, 11422 (SA). **ALSHAHRANI, Dafer M.**; PO Box
5101, Riyadh, 11422 (SA).

(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, BN, 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, IR, IS, JP, KE, KG, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

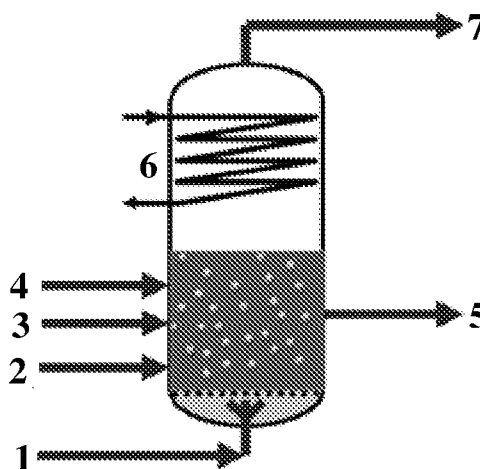
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- 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))

(54) Title: CATALYST COMPOSITION AND PROCESS FOR PREPARING LINEAR ALPHA OLEFINS

FIG. 1



(57) **Abstract:** The present disclosure relates to a catalyst composition for the oligomerization of ethylene comprising a zirconium-containing catalyst and an organoaluminum-containing co-catalyst. The disclosure also relates to a process for oligomerization of ethylene in the presence of the catalyst composition according to the disclosure. The disclosed process results in C4-C20 linear alpha olefins having improved linearity.