

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
19 June 2025 (19.06.2025)



(10) International Publication Number
WO 2025/128216 A1

(51) International Patent Classification:

C08F 4/64 (2006.01) C08F 4/659 (2006.01)
C08F 4/6592 (2006.01)

(21) International Application Number:

PCT/US2024/053199

(22) International Filing Date:

28 October 2024 (28.10.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/609,179 12 December 2023 (12.12.2023) US

(71) Applicant: **DOW GLOBAL TECHNOLOGIES LLC**
[US/US]; 2211 H.H. Dow Way, Midland, Michigan 48674
(US).

(72) Inventors: **BAILLIE, Rhett A.**; 230 Abner Jackson
Parkway, Lake Jackson, Texas 77566 (US). **NEILSON,
Bethany M.**; 230 Abner Jackson Parkway, Lake Jackson,
Texas 77566 (US). **SZUL, John F.**; 1840 Union Car-
bide Drive, South Charleston, West Virginia 25303 (US).

KUHLMAN, Roger L.; 117 Dewberry, Lake Jackson,
Texas 77566 (US). **LAKHE, Pritishma**; 16018 Grafham
Circle, Huntersville, North Carolina 28078 (US).

(74) Agent: **TWILLEY, Mark A.**; 2211 H.H. Dow Way, Mid-
land, Michigan 48641 (US).

(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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST,
SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ,

(54) Title: ADDITIVE FOR A CATALYST

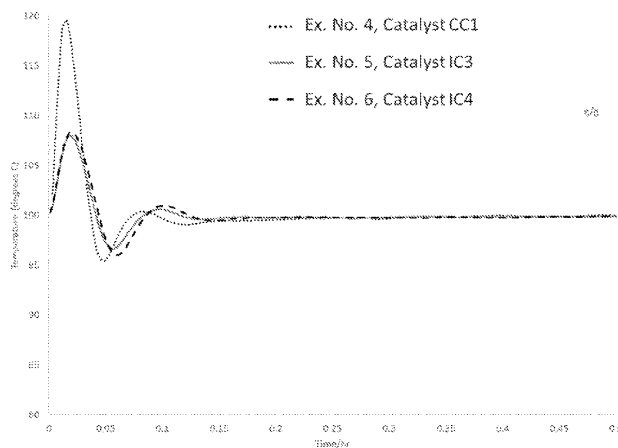


FIG. 1

Internal temperature profiles for CE F, IE 7 and IE 8

(57) Abstract: A method of making a productivity enhanced bimodal catalyst, the method includes combining a non-metallocene precatalyst, a metallocene precatalyst, an effective amount of an activator, and an effective amount of an activity-enhancing compound to activate the non-metallocene precatalyst and the metallocene precatalyst into the productivity enhanced bimodal catalyst.

[Continued on next page]

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, ME, 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).

Published:

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