

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
01 June 2023 (01.06.2023)



(10) International Publication Number
WO 2023/096868 A1

(51) International Patent Classification:

C08F 4/64 (2006.01) C08F 210/16 (2006.01)
C08F 4/659 (2006.01)

(21) International Application Number:

PCT/US2022/050606

(22) International Filing Date:

21 November 2022 (21.11.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/282,441 23 November 2021 (23.11.2021) US

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

(72) Inventors: **CAMELIO, Andrew M.**; 1776 Building, Of-
fice D-10A, Midland, Michigan 48667 (US). **BAILLIE,**
Rhett A.; 230 Abner Jackson Pkwy., Lake Jackson, Texas
77566 (US). **BAILEY, Brad C.**; 1776 Building, Of-
fice D-10A, Midland, Michigan 48667 (US). **DELORBE,**
Johnathan E.; 230 Abner Jackson Pkwy., Lake Jack-
son, Texas 77566 (US). **DO, Hien Q.**; 230 Abner Jack-
son Pkwy., Lake Jackson, Texas 77566 (US). **PEARSON,**
David M.; 230 Abner Jackson Pkwy., Lake Jackson, Texas
77566 (US). **FONTAINE, Philip P.**; 230 Abner Jackson
Pkwy., Lake Jackson, Texas 77566 (US).

(74) Agent: **HUEBSCH, Joseph C.**; 1201 Marquette Avenue
South, Suite 400, Minneapolis, Minnesota 55403 (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,

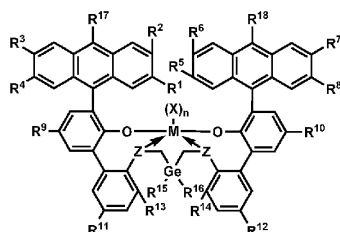
LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG,
NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS,
RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(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, 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, 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))

(54) Title: SUPPORTED CATALYST SYSTEMS CONTAINING A GERMANIUM BRIDGED, ANTHRACENYL SUBSTITUTED BIS-BIPHENYL-PHENOXY ORGANOMETALLIC COMPOUND FOR MAKING POLYETHYLENE AND POLYETHYLENE COPOLYMER RESINS IN A GAS PHASE POLYMERIZATION REACTOR



(I)

(57) Abstract: Embodiments of the present application are directed to supported catalyst systems that include a metal-ligand complex having the structure of formula (I).

WO 2023/096868 A1