

221 JUN 2002
2002038263

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 July 2001 (12.07.2001)

PCT

(10) International Publication Number
WO 01/49747 A1

(51) International Patent Classification⁷: C08F 4/02,
4/12, 4/18, 4/642

(21) International Application Number: PCT/US00/35493

(22) International Filing Date:
28 December 2000 (28.12.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/174,045 30 December 1999 (30.12.1999) US
09/564,293 3 May 2000 (03.05.2000) US

(63) Related by continuation (CON) or continuation-in-part
(CIP) to earlier application:
US 09/564,293 (CON)
Filed on 3 May 2000 (03.05.2000)

(71) Applicant (for all designated States except US):
PHILLIPS PETROLEUM COMPANY [US/US];
4th and Keeler, Bartlesville, OK 74004 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MCDANIEL, Max,
P. [US/US]; 1601 Melmart, Bartlesville, OK 74006 (US).
SHVEIMA, Joseph, S. [US/US]; 1776 Jefferson Place,
Bartlesville, OK 74006 (US). SMITH, James, L. [US/US];
1879 Putnam, Bartlesville, OK 74006 (US). COLLINS,
Kathy, S. [US/US]; 3915 Silver Lake Drive, Bartlesville,

OK 74006 (US). BENHAM, Elizabeth, A. [US/US]; 431
Shannon, Bartlesville, OK 74006 (US). EATON, Anthony,
P. [US/US]; 450 Williams Landing Drive, Sugar Land, TX
77479 (US). JENSEN, Michael, D. [US/US]; 2008 Sky-
line Place, Bartlesville, OK 74006 (US). MARTIN, Joel,
L. [US/US]; 636 Kenwood Drive, Bartlesville, OK 74006
(US). HAWLEY, Gil, R. [US/US]; 1022 N. Wyandotte,
Dewey, OK 74029 (US).

(74) Agents: RICHARDS, John; Ladas & Parry, 26 West 61st
Street, New York, NY 10023 et al. (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— With international search report.

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.



162162



ACTION

WO 01/49747 A1

(54) Title: ORGANOMETAL CATALYST COMPOSITIONS

(57) Abstract: This invention provides oxide matrix compositions that can be utilized in catalyst compositions that are useful for polymerizing at least one monomer to produce a polymer. The oxide matrix composition comprises residual mineral components and an oxide precursor. The catalyst composition comprises contacting an organometal compound, an organoaluminum compound, and an oxide matrix composition. Processes for producing the oxide matrix composition and the catalyst composition are also provided.