

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 April 2006 (06.04.2006)

PCT

(10) International Publication Number
WO 2006/036359 A2

(51) International Patent Classification:
C08F 10/00 (2006.01) *C08F 4/02* (2006.01)

(21) International Application Number:
PCT/US2005/029350

(22) International Filing Date: 16 August 2005 (16.08.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/947,721 23 September 2004 (23.09.2004) US

(71) Applicant: **EQUISTAR CHEMICALS, LP** [US/US];
One Houston Center, 1221 McKinney Street, Houston, TX
77010 (US).

(72) Inventors: **KELNDWORTH, Douglas, D.**; 9499 Gregg
Drive, West Chester, OH 45069 (US). **REINKING,**
Mark, K.; 9664 Fox Run Drive, Mason, OH 45040 (US).
KIST, Edward, D.; 6319 HAmilton Avenue, Cincinnati,
OH 45224 (US).

(74) Agents: **SCHUCHARDT, Jonathan, L.** et al.; Lyondell
Chemical Company, 3801 West Chester Pike, Newtown
Square, PA 19073 (US).

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN,
YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
RO, SE, SI, SK, 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*

*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.*

(54) Title: MAGNESIUM CHLORIDE SUPPORT

(57) Abstract: The invention relates to supports comprising inorganic oxide nanoparticles coated with magnesium chloride and a method for making them. The inorganic oxide has a mean particle diameter of less than 5 microns and is used as a seed to crystallize magnesium chloride from solution. The magnesium chloride-coated inorganic oxide is useful for supporting transition metal compounds; the supported transition metal compounds are used as catalysts for polymerizing olefins.



WO 2006/036359 A2