

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 July 2003 (03.07.2003)

PCT

(10) International Publication Number
WO 03/054027 A1

(51) International Patent Classification⁷: **C08F 4/02**, 10/00

(21) International Application Number: PCT/EP02/14373

(22) International Filing Date:
17 December 2002 (17.12.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
101 63 154.5 20 December 2001 (20.12.2001) DE

(71) Applicant (for all designated States except US): **BASELL
POLYOLEFINE GMBH** [DE/DE]; Brühler Strasse 60,
50389 Wesseling (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FRAAIJE,
Volker** [DE/DE]; Rüterstrasse 15, 60325 Frankfurt
(DE). **OBERHOFF, Markus** [DE/DE]; Paulstrasse 14,
67346 Speyer (DE). **PACZKOWSKI, Nicola** [DE/US];
9269 Kemper Grove Lane, Loveland, OH 45140 (US).
GREGORIUS, Heike [DE/DE]; Wittenbergstrasse 1,
56075 Koblenz (DE). **KRATZER, Roland** [DE/DE];

Südhang 3, 65719 Hofheim (DE). **BIDELL, Wolfgang** [DE/BE]; 4, rue Gabrielle, B-1640 Rhode-St.
Genese (BE). **WULFF-DÖRING, Joachim** [DE/DE];
Hanns-Fay-Strasse 4, 67227 Frankenthal (DE).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, 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, OM, PH, PL, PT, RO, RU, SD, SE, SG,
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZM, ZW.

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

Published:

— with international search report

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

(54) Title: CATALYST SOLID COMPRISING PYROGENIC SILICA FOR OLEFIN POLYMERIZATION

(57) Abstract: A catalyst solid comprising: A) support particles having a mean particle diameter d_{50} of from 5 to 200 μm and a specific surface area of from 30 to 1 000 m^2/g and obtainable by agglomeration of primary particles of a pyrogenic silica having a mean particle diameter d_{50} of from 1 to 50 nm, and B) at least one organic transition metal compound, can be used for the polymerization or copolymerization of olefins.



WO 03/054027 A1