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(71) Applicant (for all designated States except US): **NOV-OLEN TECHNOLOGY HOLDINGS C.V.** [NL/NL];
Oostduinlaan 75, NL-2596 JJ The Hague (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SCHOTTEK, Joerg** [DE/DE]; Ginnheimerstrasse 39D, 60487 Frankfurt (DE). **PACZKOWSKI, Nicola, Stefanie** [DE/US]; 9269 kemper Grove Lane, Loveland, OH 45140 (US). **WINTER, Andreas** [DE/DE]; An den Brunnengaerten 3, 67271 Neuleiningen (DE). **SELL, Thorsten** [DE/DE]; Falkstrasse 84, 60487 Frankfurt (DE).

(74) Agents: **CALDERONE, Adrian, T.** et al.; Dilworth & Barrese, LLP, 333 Earle Ovington Boulevard, Uniondale, NY 11553 (US).

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(54) Title: METALLOCENE LIGANDS, METALLOCENE COMPOUNDS AND METALLOCENE CATALYSTS, THEIR SYNTHESIS AND THEIR USE FOR THE POLYMERIZATION OF OLEFINS

(57) Abstract: A catalyst system includes a metallocene compound having the formula $R^9 L^1 L^2 M^1 R^1 R^2$ wherein R^9 is a bridge between ligands L^1 and L^2 and M^1 is a metal of Group IVB of the Periodic Table such as titanium, zirconium and hafnium and R^1 and R^2 can be hydrogen or aliphatic or aromatic groups. Bridge R^9 can include silicon, germanium or tin. The metallocene compound of the invention as synthesized has a racemic to meso isomer ratio of greater than 5 to 1, thereby precluding the need for subsequent separation of the meso isomer.



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