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- (71) **Applicant** (*for all designated States except US*):
LANXESS ELASTOMERS B.V. [NL/NL]; Mijneweg 1,
NL-6167 AC Geleen (NL).
- (72) **Inventors; and**
- (75) **Inventors/Applicants** (*for US only*): **DOREMAELE, Van**
Gerardus Henricus Josephus [NL/NL]; Op de Hoef 6,
NL-6132 HN Sittard (NL). **ZUIDEVELD, Martin Alex-**
ander [NL/BE]; Bauweg 43a, B-4720 Kelmis (BE).
- (74) **Agent:** **HERBOLD, Matthias**; c/o LANXESS Deutsch-
land GmbH, 51369 Leverkusen (DE).
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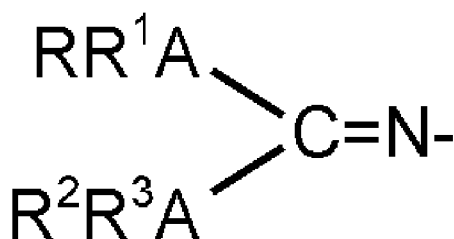
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(54) **Title:** TITANIUM-CATALYST SYSTEM COMPRISING SUBSTITUTED CYCLOPENTADIENYL, GUANIDINE AND
DIENE LIGANDS



(I)

(57) **Abstract:** The invention relates to a catalyst system for the polymerization of olefins comprising a metal complex of formula CyLMD and an activating cocatalyst, wherein M is titanium, Cy is a cyclopentadienyl-type ligand, D is a diene, L is a guanidine-containing ligand of the formula (I) wherein each A is independently selected from nitrogen or phosphorous and R, R¹, R² and R³ are independently selected from the group consisting of hydrogen, hydrocarbyl, silyl and germlyl residues, substituted or not with one or more halogen, amido, phosphido, alkoxy, or aryloxy radicals, and Cy is a mono- or polysubstituted cyclopentadienyl-type ligand, wherein the one or more substituents of Cy are selected from the group consisting of halogen, hydrocarbyl, silyl and germlyl residues, optionally substituted with one or more halogen, amido, phosphido, alkoxy, or aryloxy residues. The invention further relates to a process for the preparation of a polymer comprising at least one aliphatic or aromatic hydrocarbyl C₂₋₂₀ olefin wherein the at least one aliphatic or aromatic olefin is contacted with the catalyst system of the present invention.